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ORIGINAL ARTICLES.

A CONTRIBUTION TO THE STUDY OF TUMORS OF THE URETHRA, WITH A REPORT OF TWO CASES.

BY RICHARD H. HARTE, M D., PHILADELPHIA.

Read before Philadelphia County Medical Society.

The meager data to be found in the literature on this subject has induced me to report the two cases which have come under my charge. Those instances which have been recorded have been described under the generic term of caruncle. Owing to the advancement in pathological knowledge, and the greater facility with which we now explore these formerly hidden passages, it devolves upon us to give greater accuracy of definition. In consequence I have undertaken to relegate the tumors to the class in which they should be embraced.

While tumors of the female urethra have frequently been subjected to microscopical study, it happens that all those occurring in the male canal have only been microscopically described. Owing to the similarity in structure of tissue, it can but follow that those growths of like appearance and similar history shall be similarly constituted. I believe with the continued improvement of instruments for urethral study, and the consequent greater attention devoted to this surgical specialty, many other conditions will be brought to light which are now known as stricture, gleet, irritable urethra, and so forth. To instance this it is but necessary to note the wonderful proportions the study of laryngoscopy has assumed since the introduction of the throat mirror and its accessories. Prior to the middle half of this century the recorded cases of laryngeal tumors could readily be counted on the fingers of two hands; at the present time laryngologists record their tumor cases by the scores.

New growths in the male urethra are of rare occurrence, and their recognition dates back to 1718, when Pascal described two in his "Treatise on Gonorrhea," which occurred in soldiers. Arnaud, in 1763, cites a case where there existed a polypoid excrescence an inch long, of red color, and projecting from the urethra. Velpeau makes mention of a small growth occurring in the fossa navicularis which was mistaken by M. Thaudiere for a small pea-shaped cancer, which the latter had excised and cauterized. Hunter met with two cases, the specimen of one now being in the Museum of the Royal College of Surgeons. Dessault never met with one case in his whole experience. Norman cites one occurring in the practice of Mr. Erichsen, the growth being inside the urethral orifice of a nodulated raspberry-like appearance, the size of a cherry-stone; it bled freely. Sir Henry Thompson mentions a similar case occurring in his practice. In this instance the tumor was situated in the fossa navicularis. He describes also the specimen of a large polypoid growth about nine lines in length by three or four in width, at the junction of the membranous and prostatic portions of the urethra, which gave rise to symptoms of stricture during life. Mr. Holmes cites a somewhat similar case occurring in a man æt. 54 years. He is inclined to consider these growths a sort of intra-urethral wart, of red color, vascular, and very ready to bleed. Gross describes a case where he exposed a growth by laying open the dorsum of the penis as far back as the glans, exposed and examined a small nodular tumor about the size of half a pea, on the floor of the fossa navicularis.

Urethral growths have excited much greater interest in the female, especially since the more complete and thorough description by Clark in 1814. The most important of the urethral growths thus far described are the so called vascular tumor and polypi. These may vary in size from a millet-seed to a hazel-nut. Their seat is usually in or about the fossa navicularis, although polypi have been noticed along the course of the urethra, as far back as the prostatic portion. In the female they usually occur near the meatus. As a rule only one tumor is present, yet two or more have occasionally been met with.

Pascal in two post-mortems found the urethra studded all along its course with fungous callous excrescences, a condition which he thinks evidently caused the deaths.

Considerable diversity of opinion exists in regard to the character and appearance of urethral tumors. They are variously described as being of a pale cherry or raspberry hue, and again as having a deep congested color. Their surface is raised above the surrounding mucous membrane, their shape conical or ovoidal, with broad base, or pedunculated. They are exquisitely sensitive and bleed upon the slightest irritation. Their growth is usually slow, after they have attained a certain volume. They frequently advance in an imperceptible manner or remain stationary. Their origin is commonly insidious, and hence a considerable time often elapses before the patient is aware of their presence. Gross says that concerning the exact cause of these tumors nothing whatever is known. Volpeau thought they were produced by gonorrheal contagion.

Specific urethritis is much more frequent in the male, and this being the case, we should naturally expect to find these growths predominate in the male urethra. This, however, is not the fact; the female urethra, although seldom the seat of a specific inflammation, nevertheless affords a site for a large number of vascular tumors. Sir Henry Thompson thinks that the granular condition following, and often behind, old strictures is a predisposing and exciting cause.

Urethral growths appear to be confined to no particular period of life. Mr. Holmes cites one occurring in a man æt. 54 years. Mr. Erichsen's case, reported by Norman, appeared in a man æt. 21 years. Winckel has noticed them in female children shortly after birth.

Much confusion seems to exist about the classification of these growths. This is not to be wondered at when

it is evident that an attempt is made to describe different tumors under the same heading. Undoubtedly two distinct varieties of tumors may be found in the male urethra, the fibrous polypi and the papillomata. The fibroid polypi found in the old, and usually seated far back in the urethra or prostate, are of rather a pale pink or pearly color. They spring from the submucous tissue, with well-marked pedicles, and usually occur singly; they are not especially sensitive, and have little tendency to bleed except when ulcerated.

The papillomata are by far the most common, occupying all positions in the urethra, but preferably the region about the fossa navicularis. They vary much in size, character and appearance, sometimes being like the hard fibrous polypi, sometimes the soft cherry-colored angiomata. They are usually found in the early periods of life, although occurring at all ages. Their color varies from a light pink to a deep raspberry hue. They may assume the shape of a polypus with a narrow pedicle, or a hard nodular growth, slightly raised above the surrounding mucous membrane; or again, be soft, flaccid and present the appearance of an erectile growth. At times they do not seem to possess any more sensation than the surrounding mucous membrane. This is, however, exceptional; as a rule they are exceedingly sensitive and painful.

Mr. Paget regards the microscopical structure of polypi as composed of delicate fibro-cellular tissue, with fine undulating and interlacing bundles of filaments; blood-vessels enter their bases and ramify with wide-spreading branches, and accompanying them are the large or more opaque bundles of fibro-cellular tissue. Small cysts of synovia-like fluid sometimes exist within them.

With reference to the papillomata, Mr. Paget observes that these growths may be occasioned by an hypertrophy of the normal papilla, or may be a new formation in the part. In their general form and arrange ment they have many points of resemblance, but on an enlarged scale, to the papille, which in various localities constitute natural projections from free surfaces. Their basis-substance is formed of connective tissue, which is continuous with that which normally exists in the part; while the free surface is covered by epithelium which may vary in thickness, and in the number of its layers. Bloodvessels and nerves enter into the center of the papillæ. When a number of growths become aggregated they form a tumor of some size. It sometimes happens that the vascular tissue is so considerable that it extends throughout, even to the free surface, and the whole outgrowth seems like a vascular plexus. If a single loop be examined it will appear as if the epithelium were in contact with the capillary wall. G. Simon found one removed from a female urethra to be composed microscopically of vascular loops, which had proliferated among the papillæ and connective tissue layers of the mucous membrane, its surface being covered with pavement epithelium. Wedl also found enormously developed and tortuous vessels. He compared them to the vasa vorticosæ of the choroid, and designated them as dendritic papillary connective tissue—new growths with thin walls.

These tumors being extremely sensitive, nerve filaments have been sought for in them. Verneuil was unable to find any, but Dr. John Reid, who examined one for Simpson, found a rich distribution of nerve filaments in it. It can be readily understood why the broad and thin coated vessels bleed profusely, often on the slightest touch. These papillomata in other parts of the body have a tendency to recurrence, if not entirely eradicated, and such has been the result in the few cases that have been noticed in the male urethra. The suffering which attends these tumors at times is so great that it renders the patient utterly miserable and unfit for the ordinary duties of life. The pain is much increased by walking, horseback exercise, micturition, and sexual intercourse.

The diagnosis may often be obscure, simply from the difficulty in satisfactorily exposing and exploring the urethra. These growths may be mistaken for stricture, or the hard little irregularities following gonorrhea. It sometimes happens in using the catheter that a small polopyid growth finds its way into the fenestra and is thus torn away from its attachment. Its position may be located by means of the olive-pointed bougie, aided often by the patient, who may complain of one particularly sensitive point. When the growth is in or near the fossa navicularis the mucous surfaces may be brought into view by means of a small urethral or an ear speculum, or an extemporized one made of two hairpins forced into a small cork at right angles to each other, and the canal illuminated by means of a mirror. When the seat of the tumor is located deep in the urethra, the urethral endoscope, if skilfully used, may be of great service in making or verifying a diagnosis.

The treatment of these tumors is strictly local. Astringents, iodine and caustics have only a pernicious effect. Complete enucleation either with knife, scissors, Paquelin cautery, or wire loop is all that should be attempted; the removal by means of a ligature is both awkward and painful, and is seldom effectual. When these growths are situated in or near the meatus they may be snipped off by scissors, or, if of a polypoid character, removed by means of a wire loop or snare.

The following is a report of the two cases of papilloma that have occurred in my hospital practice:

"J. A. S., æt. 40 years, was admitted to the Pennsylvania Hospital on June 5, 1881. For some time past he had been suffering from a particularly tender and sensitive spot near the orifice of the urethra. The pain was always exaggerated when he attempted to urinate. He also had noticed that the caliber of the stream was becoming much reduced. About ten days before his admission he had consulted a surgeon, who told him that he was suffering from a stricture which required a slight operation. To this procedure he submitted. Immediately after the operation (internal urethrotomy) he began to bleed freely from the urethra. The bleeding

was controlled with some difficulty by introducing a catheter and by making pressure by turns of adhesive plaster. In a short time these were removed, but the bleeding immediately began again, necessitating a similar application in order to control the hemorrhage. Every subsequent attempt at removal met with a like result.

He determined to seek other surgical advice and came to the hospital. On admission he presented a blanched and anemic countenance, with all the symptoms of a person who had been subject to exhausting hemorrhage. A No. 12 English catheter was retained in the urethra by strips of adhesive plaster, making pressure on the greater portion of the penis behind the glans. The patient protested against having the plaster removed, saying that as soon as it was loosened the bleeding would recur. Thinking he was unnecessarily nervous, I, without hesitation, removed both catheter and straps, with the hope of finding and controlling the bleeding point. No sooner, however, had this been done than a bright stream of arterial blood flowed from the meatus. A large metallic catheter was introduced, the patient complaining of great pain a short distance from the orifice of the urethra. Pressure was applied as advised in urethral hemorrhage, but failed utterly to control the bleeding, except when sufficient to intefere with the circulation of the entire organ.

By a little maneuvering and pressure over the tender point, which appeared to be on the floor of the fossa navicularis, the hemorrhage could be controlled. Having determined that this was the site of the hemorrhage, and the condition of the patient necessitating immediate interference to prevent the bleeding, operative procedure was begun. An extemporized tourniquet was placed on the penis. The patient was etherized, and the urethra more carefully explored by means of an olive-pointed bougie, which revealed a marked constriction about an inch from its orifice. In order to expose it, the urethra was laid open on a grooved director, as far back as the corona, which disclosed a dark cherry-red nodular growth, about the size of a split pea, and very sensitive. The patient flinched when touching this point after other reflexes were abolished. On loosening the tourniquet the blood spouted from a fair-sized vessel in the center of the growth. Any attempt to ligate the bleeding point was fruitless, owing to its density. Astringents were also useless. The actual cautery was then resorted to, and vigorously applied until the entire growth was destroyed. The hemorrhage was completely controlled. The wound was brought into apposition and closed with two hair-lip pins. A soft, flexible catheter was introduced into the bladder and allowed to remain *in situ* forty-eight hours.

The wound united by primary union, and on the third day the pins were removed. A liberal diet and full doses of iron and quinine soon brought color to the blanched lips, and on the eleventh day the patient desired to return home, saying that he felt perfctly well, free from pain, and experienced no difficulty whatever in urinating.

The second patient presented himself at the Out-Patient Department of the Pennsylvania Hospital in 1885.

For some months past he had noticed a particularly painful and sensitive point a little within the urethra, the pain always being increased upon attempted micturition. He had also noticed that the caliber of the stream was becoming much reduced. He had consulted a physician who, after an examination, informed him that he was suffering from a stricture of the urethra. He had ordered him a short metallic bougie, with directions how to use it. Every attempt to introduce it produced so much pain that he was forced to abandon its use, and determined to seek other advice.

He presented the physique of a strong, well-developed man, of good color. Penis of normal size, and prepuce well retracted. A sensitive point was discovered on digital examination, directly under the corona. An exploration with the bougie made apparent an obstruction of some size about the fossa navicularis, so sensitive that it was impossible to satisfactorily explore it. Ether was administered, and, assisted by Dr. D. B. Birney, the penis was laid open on the dorsum, sufficiently to expose the floor of the fossa navicularis. A dark cherry-colored growth, about the size of a half pea, was exposed, with a smooth mucous covering, situated on the floor of the fossa navicularis, and raised some distance above the surrounding tissue, with no tendency to bleed, but excessively sensitive. On the slightest irritation he would evince pain after all the other reflexes were abolished. The growth was thoroughly destroyed, as in the first case, with the actual cautery, and the wound carefully approximated with two hare-lip pins. These were allowed to remain two days, the wound uniting *per primam*. The patient expressed himself as greatly relieved, experiencing no pain whatever, nor difficulty in micturition.

When the character of the growth is similar to the two cases cited, which are decidedly the most troublesome and annoying, the only procedure to be employed is to lay the penis open on the dorsum, cutting through the spongy portion from the urethra out. The hemorrhage is controlled by a small rubber cord tied around the base of the penis. This incision should expose the mucous surface as far back as may be deemed necessary; the growth may then be enucleated by any of the above-mentioned plans, care being taken to remove sufficient surrounding tissue to guard against recurrence.

The wound on the dorsum of the penis (after washing with a solution of bichloride of mercury, 1 to 2000) may be approximated by means of hare-lip pins, and a soft English catheter placed in the bladder. My last case did quite as well as the former, although the catheter was dispensed with. The parts being very vascular the wound heals quickly, and usually by first intention. The pins can be removed on the third day, and on the fourth or fifth day the patient will be practically free from all further trouble.

A RETRO-PERITONEAL FATTY TUMOR.

BY H. H. MUDD, M. D., ST. LOUIS.

Fatty tumors of the abdomen are sufficiently rare to make the following case noteworthy.

Mrs. M. B., æt. 71 years, long a resident of St. Louis, suffered for nine years from the presence of an abdominal tumor. She was a large, well developed, healthy German woman. She had, until within two years of her death, been an active, energetic woman. Menstruation ceased in her fifty-second year. She first noticed some discomfort in right lower abdomen twelve or thirteen years ago. A tumor or lump was discovered nine years ago, since which time its growth has been persistent. I examined her first in April, 1889. My notes of the case give the following: Abdomen now protrudes sharply forward and is pendant, resting on the thighs when the patient is in sitting posture. Lateral protrusion in loins is slight. Percussion sound dull. Fluctuation apparently distinct and ascitic fluid is believed to be present. Some irregularities or nodules can be outlined in the tumor mass. The linea alba from sternum to pubes measures 28 inches; from sternum to umbilicus 20 inches; circumference of abdomen at loins 59 inches; the circumference of the base of the tumor, or of the line of junction of the protuberant abdomen with the body, 55 inches. The uterus is small, mobile and free from the tumor. Patient is otherwise well, there being no organic disease at this time evident, though she is some what emaciated.

June 15th, I again examined patient. Emaciation marked; edema of legs and of lower part of abdominal walls very great; circumference of abdomen at loins, 66 inches. She now, though heretofore declining operation, insisted upon an attempt at removal. After consultation, this was attempted. The exploratory incision was made June 20th. It revealed what I believed to be a retro-peritoneal fatty tumor, and the incision was closed. Patient seemed to be but little disturbed by the operation; sat up in bed next day but maintained the recumbent position most of the time, and died June 25th of edema of the lungs and exhaustion.

Post mortem. A large fibro-lipoma filled the abdomen. It sprang from the posterior wall and occupied, or was adherent throughout, the right lateral region from the liver to the brim of the pelvis, and to the median line from the coeliac axis to the sacrum, and also to the upper portion of the left posterior abdominal wall, its firmest attachment being along the spine. The pyloric end of the stomach, the duodenum and the pancreas were imbedded in the mass. The spleen was lifted forward with the pancreas and was adherent to the tumor. The small intestines and the colon were pushed over to the left side posteriorly and occupied the lower part of the peritoneal cavity. The lower end of the ileum was imbedded in the anterior portion of the tumor, so that the head of the colon was adherent, to and lifted forward with the tumor mass, but carried off toward the left side. Both kidneys were displaced and surrounded by the tumor. The right kidney was carried downward and forward in the tumor fully a foot from its normal position. The left one was deeply placed in the substance of the tumor. The left portion of the free edge of the liver was closely adherent to a fissure in the mass. The bladder, uterus and broad ligaments were entirely free. There was no ascitic fluid. The tumor was lobulated, with a varying degree of density in its lobuli. It weighed 63 pounds. There were no adhesions of the peritoneal surfaces and no evidence of local irritation at the site of the exploratory incision or in its neighborhood.

Dr. E. C. Gehrung examined Mrs. M. B. about five years ago. At that time the uterus was prolapsed. The tumor could be outlined and seemed to project into the pelvis from behind and above, and he thought it was not connected with the uterus or the ovaries. He found the tumor irregular in outline and lobulated.

I am not sufficiently familiar with the literature of this class of abdominal tumors to know fully the recorded cases, but they seem to be infrequent.

Greig Smith, in the second edition of his work on "Abdominal Surgery," published in 1888, makes no reference to them when considering solid tumors of the abdomen.

Henry Morris, in his article on "Injuries and Diseases of the Abdomen," in the "International Encyclopedia of Surgery," speaking of fatty tumors, says: "The London Pathological Society's Transactions contain three such, and in the *Lancet* for 1883 one was reported."

John Homans, in his report, made in 1887, of "Three Hundred and Eighty-four Laparotomies for Various Diseases," gives the history of "Two Immense Lipomas." One in a man, æt. 38 years, was first noticed a year before its removal in February, 1882. It was retro peritoneal and weighed 50 pounds. The second one, in a female æt. 61 years, weighed 35 pounds.

Lawson Tait, in the fourth edition of his work on "Diseases of the Ovaries," does not, when considering the differential diagnosis of an ovarian tumor, mention fatty tumors.

In considering the history of this case, it should be remembered that it is exceedingly difficult to elicit the differential points of the diagnosis of ovarian tumors after they obtain a very large size. Their relations to surrounding parts are obscured and their fluidity and history are their chief characteristics Now as no one sign or symptom is diagnostic, and the grouping of a number of the signs not necessarily distinctive, the diagnosis of the large tumors is rather by exclusion than by direct evidence.

Myoma was excluded by the freedom of the uterus; cancer and sarcoma by the history and size of the tumor. Absence of organic disease, as well as the size of the tumor, its nodular character and its apparent innocuousness, excluded cysts of the various organs, except, perhaps, of the ovary, contained in the abdominal cavity. The diagnosis then, it appears to me, rested be-

tween the miltilocular ovarian cyst and the rare condition, a retro-peritoneal fatty tumor.

Palpation of fatty tumors will often give a sense of fluctuation which deceives even an educated touch. Fluctuation here seemed very distinct. The twelve years duration, though long, yet does not militate against an ovarian tumor. I have among my recorded histories one in which the emaciation was great, the size relatively quite as large as in this instance, and the time of growth of the tumor twenty years, where it was found, upon its removal, to be ovarian, and recovery followed. The exploratory incision here revealed the true nature of the tumor.

AN ABDOMINAL CLAY ELECTRODE.

BY FRANK R. GLASGOW, M.D.

Presented Before the St. Louis Obstetrical and Gynecological Society.

The following described electrode is one which I devised for the sake of cleanliness and to avoid the necessity of manipulating wet clay every time I applied electricity in any great strength. The patient's clothes, abdomen and various articles invariably became soiled before I began to use this instrument.

The electrode can be made by any one with moderate mechanical ability.

The electrode is a shallow round vessel made of leather. The bottom is a round piece of leather of moderate thickness. The sides are formed of a strip of 1 to 2 inches in width. A round hole is cut in the bottom in order to allow the connection for the wire of the leaden or copper plate to protrude. The plate fits loosely in the bottom. The top edge of the sides of the cup are turned over, and sewed, so as to form a rim.

The cup is well oiled. The oil should contain camphor, or carbol-camphor, or other antiseptic, in order to prevent mildew from forming.

The cup is now filled with soft, moist clay, and over the surface extending over the leather, is laid one thickness of blotting paper. This keeps all fine particles of clay from sifting through. Over the whole and extending down the sides is drawn a piece of cotton cloth, which is held fast by a rubber band sprung over it. A little warm water is poured over the surface and the electrode is ready for use.

After using this on one patient, the cloth can be rinsed out and replaced, the clay and filter paper remain in situ.

The clay will remain moist indefinitely if a piece of rubber cloth is placed over the top. The electrode can be warmed by laying it in hot water or placing it over boiling water. The electrode is not very pliable, and is heavy, both good qualities in the great majority of cases. The distance the current has to pass is equal in all parts of the electrode, and even if this were not strictly true, the resistance is so little that it is practically so.

I have obtained (with Graeffe's miliampere meter) 120 M.A. with 14 cells. (Microphone, a muriate of ammonia cell). The skin was very moist and the water with which the clay was mixed contained a little sulphuric acid. The weight of the electrode keeps it in good apposition; and this is certainly an advantage, as any one knows who has used powerful currents. I usually add a binder to fasten it in place and prevent accidents.

By using an electrode of very little resistance, and having the skin moist, one can dispense with the great number of cells sometimes used. The intercellular resistance should be reduced by using heavy wire, and having the battery near the switch-board. I have never been able to use more than about 17 cells when the above conditions were fulfilled, i. e., about 170 M.A.

The platinum electrodes can be made by any good instrument maker, and if the platinum portion is made hollow, and filled with lead or other metal, it will not be expensive.

The carbon electrodes of Apostoli are not easily made, and do not seem so durable.

In my opinion no gynecologist should be without a galvanic battery. Electricity (galvanic) although it will not cure all that it is claimed to cure, still it is by far the best anodyne for uterine and pelvic pains with which I am acquainted. It will save many a woman from the morphine habit.

OBSTRUCTION OF THE NARES CAUSING NERVOUSNESS, WITH REPORT OF CASES.

BY HAL. FOSTER, M.D., KANSAS CITY, MO.,
Visiting Laryngologist to St. Joseph's Orphan Home.

It is my desire in the presentation of this subject, to invite especially the attention of the general practitioner to an infrequent form of nervousness, which, it would seem, is still left to the specialist for recognition. There is without doubt an intimate connection between many forms of nervousness and a chronic thickening of mucous membrane covering the posterior portion of the inferior turbinated bodies and the septum narium, immediately opposite.

It is to this especial etiological feature of the affection that I shall draw attention.

To begin, let me call attention to a few recognized natural facts which will lead up to the utimate argument.

Grief causes tears to flow, the facial muscles to contract.

Fear induces tremor of the muscles, a cold surface to the body,and yet a profuse, but cold perspiration.

Mental excitement acts immediately, in many, on the secretions of the kidneys and bowel, causing both to act copiously.

Nasal stenosis has lately received much attention from laryngologists in all parts of the world, and has been the theme for many valuable papers.

The recognition of this condition as the cause of many direct and reflex respiratory and neuralgic phenomena has given the subject an interest which promises to result in adding valuable knowledge to the field of nasal and laryngeal diseases.

I hope you will pardon me if I give you my personal experience, with the result of observations which have extended over a period of several years. No effort has been made to present the literature on the subject, but to give the writer's view and personal observations.

The clinical history of four cases will be given, proving the correctness of the statement that an hypertrophy of the parts mentioned contributes in a great measure to the development of this form of nervousness.

Case I.—Mr. B., a gentleman æt. 36 years, applied for treatment, complaining of great prostration and obstruction of the nose. He had a pleasant home, still he was very unhappy and despondent. The left side of the nose had been closed for some time, and through the other he could breathe at times but never freely. Under the direction of his family physician he had spent the winter in California.

Receiving no benefit, he came to me as a last resort. He complained of pain on that side; there was a copious and constant discharge from the nose; at night he snored loudly.

The sight of ladies in my waiting room would make him so restless that he would have to leave the room and walk in the hall until time came for his treatment. His family history was good; he was a large, robust man, whose appearance would indicate that he was free from nervousness. Up to the age of 25, he never knew what it was to be nervous.

Now his memory was bad. Although previous to the nasal obstruction the memory had been excellent.

When compelled to wait in my reception room while I was busy with other patients, he would grow exceedingly nervous, and when I was ready to receive him he would be in a profuse perspiration. He knew the treatment would be painless, still he could not control his feelings.

Under different circumstances the same thing had occurred to him again and again.

Anterior rhinoscopy showed the nostrils to be stenosed by gelatinous polypi; the posterior nares was found to be obstructed by a large irregular growth, the margins of which were resting on the soft palate, the upper border encroaching upon the pharynx; the Eustachian tube was concealed, and was of a light pinkish hue, cartilaginous feel. Operation was decided upon at once. Piano-wire No. 5 was used in the Jarvis' wire ecraseur; the nose was first cocainized by a 4% solution; about one hour was occupied in making slow traction on the snare, cocaine being used to prevent pain. No hemorrhage occurred during the operation.

That night he slept well, and was able to breathe through the nose. Several days after the first sitting the nervousness had about disappeared, although by means of the galvanic cautery I was still working on smaller polypi. I removed five in all.

In about four weeks of daily treatment the nervousness had entirely disappeared. I attended a reception two months afterwards at his house, and he could now meet his friends without feeling the extreme reserve that he had felt previous to the operation.

Case II.—Miss H., æt. 19 years. Came under my care in June. Had been troubled about two years by obstruction of the nose. She said that she was easily excited; was very nervous; the least little thing that went wrong would make her angry. There was impairment of the sense of smell, and a sanious discharge from the nose. By means of a Jarvis' cold snare I removed a large polypus. There was a large hypertrophy on the posterior portion of the tubinated bodies. A 4% solution of cocaine was first applied to the nostrils, and the tumor reduced by means of direct application of the galvano cautery. If the proper precautions are used, the operation is free from pain.

Three months later the patient was well, there being no recurrence of the nervousness.

Case III.—Miss H., æt. 17 years, was kindly sent to me by my friend, Dr. H. of this city. She had been spending the summer at Denver and Manitou Springs, Colorado. Very little relief, if any, was given while there. Each month she was obliged to breathe more and more through the mouth, causing excessive snoring at night and great nervousness during the day. Examination of the pharynx by means of the rhinoscope revealed a large smooth, grayish - white tumor, completely occluding the posterior orifice of the left nares. Tumor was removed by means of Jarvis' snare, after using cocaine. Only one application of the galvano-cautery was necessary, as the growth was so completely removed. Subsequent treatment was not deemed necessary. She is now happy and contented, and is a source of pleasure to her friends.

A physician friend of mine from Kansas was operated on for about the same trouble in September. In three days he returned home and has had no return of the trouble.

In using the galvano-cautery I wish to say that great care must be exercised; with such care, it is by far the best agent at our command for treating such cases. I do not mean to say that every case of occlusion of the nose will give rise to nervousness; yet there are cases where a foreign body in this organ sets up a reflex action, and we can only obtain a cure of the trouble by examination of the nose and removal of the obstructing element. It behooves us in every case of obscure nervousness to examine the nose and throat with great care

REPORT OF A CASE OF UTERINE TUMOR, FOR WHICH HYSTERECTOMY WAS SUCCESSFULLY PERFORMED.

BY JOHN H. PACKARD, M. D.

Surgeon to St. Joseph's Hospital.

Read before the Philadelphia County Medical Society.

Maggie McK., æt. 23 years, single, was admitted into St. Joseph's Hospital, January 12, 1889, on account of an abdominal tumor. She had always enjoyed good health until about two years ago, when in attempting to lift a heavy tub of water, she felt a sharp pain in her right side; this continued for about a week, being so severe as to compel her to keep her bed.

Some seven months later she noticed in her right side a lump, painful on pressure, and about as large as an egg. This steadily increased in size, until at the time of her admission to the hospital it occupied the whole lower segment of the abdomen, rising above the umbilicus. The mass was hard, smooth, not lobulated, without special tenderness and slightly movable. Not the slightest fluctuation could be perceived in it.

On examination, the parts presented the normal virgin condition. Bimanual palpation made the fact of uterine involvement quite evident.

Menstruation, which had begun at her sixteenth year, had been quite regular until a year ago, when it became more frequent, and was at times very profuse, amounting to serious flooding. Occasionally a period was delayed from one to three weeks, and at such times she suffered great pain.

The patient was in good condition and anxious for relief. An operation was determined upon, and the 27th was appointed for its performance. On the 26th her catamenia, which had been delayed ten or twelve days, appeared, and the flow was very free on the next morning, but this fact did not seem to affect the case in any way.

Operation. January 27. Present, besides the hospital staff, Drs. Joseph Price, C. B. Penrose, Augustus Wilson, Alex Hazard, W. Hunt and one or two others.

Full antiseptic precautions were, of course, observed; the patient was etherized, and an incision made from the umbilicus to the pubes. On entering the peritoneal cavity, a smooth, firm, elastic, ovoid tumor was exposed. Large veins ramified over its surface, their general course being upward and downward. Introducing the hand into the abdomen I found the mass free from adhesions, but involving almost the whole of the uterus. By a little manipulation, and after some upward enlargement of the wound, I turned the tumor out, keeping the omentum and intestines back by means of a large flat sponge. The appendages were next drawn up alongside of the growth, and each broad ligament was grasped with large clamp forceps, severed, and for greater security, catgut ligatures were placed on all the vessels seen to be divided, in addition to a ligature including the whole.

A rubber cord was next cast around the body of the uterus, low down, in three turns, and firmly tied. (I had intended using a wire loop with a serreneud, but the gentleman who had promised me the loan of the instrument had failed to bring it with him.) Lest the loops of the rubber cord should slip, two long surgical pins were inserted at right angles to each other through the body of the uterus. The mass was now cut away, and the stump pared down close to the pins. No bleeding being apparent, the abdominal cavity was syringed out with hot water, and the stump brought down to the lower angle of the wound, which was at once closed. The peritoneum was separately sewed with fine catgut, the lowest stitch being carried through the peritoneal covering of the deeper part of the stump. Silkworm gut, shotted, was used for bringing the divided edges of the skin and muscle together. No drainage was employed, but a few strands of catgut were placed in the upper angle of the wound.

The points of the pins were guarded with bits of cork and the skin further protected by iodoform gauze. The usual antiseptic dressing was carefully applied in the manner so well known that its details may be omitted here.

The patient reacted well, and experienced very little pain. On the morning of the third day the temperature reached its maximum—101.8°; her pulse being 132. On the fifth day, both temperature and pulse had become normal, and the progress of the case thereafter was uninterruptedly favorable. Some annoyance was occasioned by loss of power over the bladder and rectum, the use of the catheter two or three times in the twenty-four hours being necessary until the ninth day. On the sixth day, an enema was given, and the bowels freely evacuated; this had to be repeated about every third day for two weeks, after which it was no longer required.

The dressings were undisturbed until the seventh day when the pins were removed, as the tension on them caused some discomfort. All the silkworm-gut sutures, except the lowest one, were taken away at the same time, the wound being firmly united.

The rubber cord did not come away until the thirty-seventh day, and there was no discharge, with separation of sloughs, for two weeks later, when healing was completed. During this time, one week after removal of the cord, a profuse purulent discharge occurred from the vagina, and was checked by washing out that canal with hot water.

The patient left the hospital in perfect health April 6, sixty eight days after the operation. A vaginal examination previous to her departure showed the os very much atrophied, and directed backward, as if it belonged to a uterus in a state of marked anteversion.

I would express my acknowledgements to Dr. L. I. Blake, late resident physician at the hospital, for his kindness in furnishing the data for these notes.

TRANSLATION.

COUNTER-INDICATIONS TO THE SUSPENSION TREATMENT.

BY DR. PAUL BLOCQ.

Translated by Dr. Benno Von Steinmetz, St. Louis.

Since the treatment of progressive locomotor ataxy any other affections of the nervous system by suspension was advocated by Dr. Motchoutkowsky, and sanctioned by Dr. Charcot, it has spread rapidly in every direction and is now used not only by the profession, but also by the laity, in such an indiscriminate way, that a few words as to the counter-indications for this treatment will not be amiss. Dr. Charcot has, in one of his lectures, indicated the cases in which suspension is beneficial.

First of all, it seems only prudent that the application of this treatment should always be confined to a physician or an experienced assistant. It has been customary in city practice for the physician, after having himself conducted the suspensions a number of times, and explained the modus operandi to the relatives of the patient, to leave the succeeding treatment in their hands. The result has been up to the present time, three fatal accidents, which would have been averted if a physician had been present. The history of these cases is as follows:

The first is the case of a man, reported by Dr. Vincent, and a woman, both of whom succumbed in the same way; they had suspended themselves according to the recommendation of an American physician, when, of a sudden, the bandage under the chin slipped and they were strangled to death. The third case is reported by Dr. Blocq. The patient was suffering from tabes dorsalis, showing some signs of general paralysis, and the suspension treatment was instituted. The first few applications were made by Dr. Blocq himself and were followed by some amelioration; the succeeding treatment was left to the patient to carry out, without the surveillance of the physician. Shortly after, the doctor learned that after a suspension the sick man was attacked by coma, and died 24 hours afterward without regaining consciousness. It could not be learned whether he died of an apoplectic attack or whether it was the result of an accident. Several more or less unpleasant accidents have happened to patients treating themselves, and serious ones may be looked for, all of which shows the necessity of the physician's supervision each time. The counter-indications may be grouped under three headings: 1. The state of the general health. 2. Certain affections of the nervous and cardio pulmonary system, and 3. Certain local lesions.

1. Organic debility, be it from the nervous affection itself or from any other cause, is one of the least favorable; anemia, so often the cause of general debility, especially if accompanied by disorders of the circulation; edema, which makes the usually painless suspension exceedingly painful, as has been noticed by the author; and obesity, which is not in itself a counter-indication to the treatment, but which makes surveillance indispensable and necessitates greater precaution.

Weir Mitchell has constructed an apparatus in which the axillary pieces are replaced by supports to the elbows, pressed close to the sides, and which is furnished with a double system of blocks, the one for the elevation of the body by the elbows, and the other for the traction on the head alone. This apparatus has the advantage of not compressing the axillary vessels and nerves, and of graduating the extension of the head, allowing the operator in this way to lengthen or shorten the duration of suspension without immediate inconvenience.

2. It has been observed that during suspension the respiration is more frequent, and at the same time the movements of inspiration and expiration are diminished in their amplitude; cases of phthisis pulmonalis, emphysema and chronic affections of the air passages in particular, were much oppressed; would this counter-indicate suspension? The same can be said of the majority of cardio-vascular affections; atheromatous degeneration of the arteries countra-indicate, because rupture of the same may be precipitated. Suspension accelerates the frequency of the pulse and augments arterial pressure, consequently this treatment is not recommended in patients subject to congestion or to apoplectic attacks. It is important to examine the sick with reference to this point. Mitral and aortic lesions forbid the use of suspension, because of the dyspnea, somnolence and tendency to syncope to which these affections predispose.

Of the nervous affections which counter-indicate this treatment we know as yet very little; vertigo seems to be one of them, although Dr. Charcot recommends that the operator speak to the patient during the suspension, which will often do away with the dizziness. It is of the utmost importance to minutely observe every symptom at the first trial of the treatment, and to act accordingly.

3. Before applying suspension, examine the condition of the teeth, determine whether they will withstand the pressure of the chin-bandage. Also ascertain if the patient is subject to spontaneous fractures, often present in certain cases of tabes; if this tendency be present, abstain from the suspension.—*Le Bulletin Medical*, June 9, 1889.

How to Inject Antipyrine without Pain.—This valuable information is given by Dr. Faugeray in the *Jour. de Med. et de Chir. Prat.* The method consists in filling the hypodermic syringe three-fourths full of a 50 per cent solution of antipyrine, then using the remainder of the syringe barrel for a 5 per cent solution of cocaine. This little maneuver is said to be entirely successful.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,
EDITOR.

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J. H. CHAMBERS,
914 LOCUST STREET, ST. LOUIS, MO.

SATURDAY, JULY 6, 1889.

ELECTRICITY IN ENURESIS.

Not long since we had occasion to speak of the treatment of infantile enuresis by means of electricity, applied directly to the sphincters of the bladder by means of a urethral electrode, as suggested and practiced by Guyon. Although this method has been used chiefly in boys, its applicability and happy effect in girls are clearly shown by M. Jamin, in his account of a case which he treated in this way.

The patient, a girl, æt. 15½ years, had been affected since childhood; she had disappointed her physician and parents who had hoped that with the approach of puberty, the complaint would vanish. All of the approved plans of treatment had been given a fair trial; some gave transient relief, others had no effect. Dr. Jamin himself gave belladonna in increasing doses for a year, but to no purpose. He at last obtained the consent of the patient to apply electricity, the use of which gave the most marked, prompt and favorable response. In all there were eleven seances, and after the beginning of the treatment, only once did the urine pass in bed.

The technique, in brief, is as follows: A bulbous sound, No. 16 Charriere, insulated except at the bulb, is moved slowly throughout the urethral canal, but not into the bladder.

The faradic current of very weak strength, 2 or 3 milliamperes, is employed, negative pole in the urethra, the positive to the thigh—not to the abdomen, as it is desired to avoid any contact of the current with the bladder. The seances occupy five or eight minutes, and are repeated every other day, until a cure is affected.

CANCER, ITS CONTAGIOUS CHARACTER AND MODE OF PROPAGATION.

In *l'Union Medical*, for April 25th last, Dr. Arnaudet gives an interesting and instructive analysis of what has been almost an epidemic of cancer of the stomach, prevalent in two villages in France, during the last eight years. In the paper he makes the rather startling claim that, not only is cancer an infectious and transmissible disease, but that water is the ordinary vehicle of transmission of the morbid germ; and not only may natural water transfer the contagious element, but cider as well. He has arrived at these conclusions from a study of the cases mentioned: They occurred successively, from house to house, from above downwards, towards the valley, in the direction of the flow of water. The common drink of the country is cider, and the affected ones were especially fond of cider; it is reasonable to suppose, then, that in these cases, it was more liable to be due to cider than water. His arguments are not strikingly forcible, but they are unique, to say the least.

In summing up, he says that, although further testimony is necessary for positive proof of his theory, he nevertheless believes:

1. That cancer prevailed to an excessive extent in the part of Normandy mentioned; there must then be some local cause.

2. Clinical experience authorizes an affirmation of the infectious and transmissible nature from one subject to another.

3. That water, as in typhoid fever, is the transferring agent; that in this particular instance natural water (cider) was the probable vehicle.

4. That pond water and, in fact, all impure waters, should be avoided in making cider.

5. Our present knowledge warns us of the duty to destroy, as far as lies in our power, all morbid products of patients (the vomit of cancerous patients, sputa of consumptives, typhoid stools, etc.). In lieu of a more powerful antiseptic, one may always have at hand boiling water, with or without the addition of sea-salt.

Apropos of this, may be mentioned the paper recently read by Hanau, before the Congress of German Surgeons, entitled "Inoculability of Cancer." The author said that in dissecting a female rat he had found a cancer of the vulva, with tumefaction of the axillary and inguinal ganglia. A fragment of the tumor, taken from a non-ulcerated part, was introduced into the vaginal tunic of another rat, which, in due time, developed a cancer of the peritoneum. Microscopical examination confirmed the diagnosis. Before the inoculation there was no trace of cancer in this rat.

A second one was inoculated with the same success; and from this animal a third was inoculated. The autopsy on the last one was made in the presence of Dr. Koch, who was thus able to confirm the report made. The great epiploon, the peritoneum and the ganglia of the posterior mediastinum were infilrated with cancerous odules.

Heidenhain, Hahn and Von Bergmann have each obtained positive results in some experiments in the inoculation of cancer from one animal to another.

OVARO SALPINGITIS.

M. Terrillon recently presented a communication to the Academy of Medicine, Paris, concerning fifty cases

of ovaro-salpingitis treated by laparotomy. It was his opinion that simple catarrhal salpingitis, with adhesions and thickening of the walls of the tube, originating from gonorrhea or suceeeding abortions, gave results that were almost constantly excellent. Often ablation confined to the side most affected, especially in old cases, produced rapid and durable cure.

Hemorrhagic salpingites entail various complications and troubles, either from their volume, which involves more extensive operations, or from their duration, as they usually date back many years. Muco-purulent and suppurative splaingitis are most dangerous. But when they are voluminous, even though the affected organs can not be taken away, drainage by laparotomy gives good results, as was shown in five of his cases treated in this way, all recovering. When they are smaller aud yet require ablation, exceeding care must be exercised because their rupture into the peritoneum at the moment of ablation is not rare; in this way the author lost two cases.

As to tuberculous salpingitis, these cases give results least encouraging, because of the difficulty of removing all of the affected tissues. One case was lost, but manifest amelioration was obtained in the others (number not mentioned); and one should not hesitate to offer the benefit of surgical intervention to such.

The Favorable influence of Coughing on the Reduction of Hernia.

Dr. Vaudenabrele in the *Jour. de Med. de Paris*, gives a surprising account of the effect of coughing on some cases of strangulated hernia, which have come under his observation.

The first was a merchant who had pulmonary emphysema for many years. One day his hernia became strangulated and Dr. Vaudenabrele was called in. Five minutes of taxis produced no effect. Suddenly, contrary to his direcitons, the patient coughed violently; while still holding the hernial tumor, he heard a gurgle and the hernia had decreased to half its volume. A repetition of the coughing was followed by reduction complete!

Wondering if there could have been a dilatation of the inguinal ring produced by the cough, the doctor determined to be on the lookout for anything that would throw light on the subject.

He was called, not long afterwards, to see a woman, whose crural hernia was in a state of strangulation. A surgeon who had preceded him had tried taxis for more than a half hour, but without avail. Dr. Vaudenabrele also tried it for two or three minutes; he then had the patient cough violently while controlling the hernia, and it was at once reduced. A third case was equally as amenable to this method, even after taxis had been employed both by himself and another surgeon. He therefore believes that he has found a method, simple, easy, applicable at all times and to all cases, superior to taxis and to any measure which has been described up to the present time.

The author's explanation is that, in the first place, the cough is capable of dilating the inguinal and crural rings. Gas inclosed and compressed in the strangulated intestine, at the moment of expansion of the ring, makes its escape into the abdominal part of the gut. The hernia then becoming a simple one, is also reducible.

MEDICAL ITEMS.

Roosevelt Hospital, New York, has been bequeathed $350,000 to build and endow a Surgical Operating Theater.

Number Two.—A medical practitioner of New York met his death quite suddenly while practicing self-suspension alone.

The friends of Dr. Richard J. Levis propose to perpetually endow a free bed in the Philadelphia Polyclinic Hospital, in recognition of his professional eminence.

No Rates.—The Committee of Arrangements was unable to secure special railroad rates to the American Medical Association Convention. This was unfortunate for all concerned.

The St. Louis delegation to the American Pharmceutical Convention met with an accident in the shape of a collision with another train when just west of Cheyenne. Happily no one was injured.

Prof. Gross' Successor.—Dr. W. W. Kean, of Philadelphia, has been called to the chair of Surgery in the Jefferson Medical College left vacant by the death of Prof. Samuel W. Gross.

Mrs. Jane C. Stormont, widow of the late Dr. D. W. Stormont, of Topeka, has generously given $10,000 to the Kansas Medical Society for the purchase of a library for the benefit of the profession.

Practical Application of Hypnotism.—It is claimed by some that the thirst and desire for intoxicants can be cured by hypnotism, and a hospital has already been opened in Paris for that purpose.

The Danger of Celluloid.—A child wearing a celluloid comb in her hair approached too near a grate-fire; the result was a sudden explosion and painful burning of the little one. Beware of celluloid collars this hot weather!

Test for Antipyrin.—Mr. A. C. Stark, in *Pharm. Journal*, gives the following: Place in a test-tube a few grains of potassium nitrate, add a little water and then an excess of strong sulphuric acid, and fill up the tube with

the suspected liquid. A green coloration is immediately produced if antipyrin be present. The test is delicate and reliable and has the advantage of being specifically characteristic of antipyrin.

Electricity in Intestinal Obstruction.—Dr. Lavat advocates the use of galvanic electrization in all cases of intestinal obstruction, and reports six successes from it. Sometimes more than one application is necessary to bring about a movement.

Effect of Pepsine on Medicine.—The addition of pepsine improves the effectiveness of many medicines, such as balsam of copaiba, oils of cubeb and sandalwood, cod liver oil, etc., forming with them, according to the *Ph. Centralh.*, emulsions.

The Effect of Phosphate of Soda on the Excretion of Uric Acid.—According to Haig, of London, the administration of phosphate of soda increases noticeably the amount of uric acid in the urine. He thinks that it is, therefore, preferable to salicylate of soda in gout.

Through the courtesy of Dr. Y. H. Bond we are enabled to publish the very enteresting letter from Dr. Meisenbach, which appears in another part of this issue. Dr. Meisenbach promises to keep us informed concerning the interesting events connected with his trip abroad.

To Abort a Felon.—The method recommended by Dr. Gaucher, of Algiers, is that of moistening the painful part slightly with water and then applying a stick of nitrate of silver to it. The blackness left by the color is the only drawback to this treatment. A small cantharidal blister is probably much preferable and leaves effects less unsightly.

A Prospective Antirabic Institute in London.—M. Pasteur has recently addressed a letter to the Lord Mayor of London arguing for the establishment of an antirabic institute in England.

From the fact that the Lord Mayor has publicly announced his intention of taking some steps to further the beneficent work of Pasteur, the probability is that the communication will meet with a favorable response.

Gangrene from Carbolic Lotion.—Another case of gangrene following the local application of strong carbolic solution is reported, this time by Charles Monod.

A young lady had been cut on the thumb, and a druggist did the treating. According to his orders, she held the member in the solution a quarter of an hour each day for five days, after which the gangrenous change began to manifest itself.

Bequests.—It is announced that the late Mrs. Sargeant, daughter of Dr. Oliver Wendell Holmes, has bequeathed to Harvard College $10.000 as a memorial to her father, the income to be applied for the use of the anitomical department; $25,000 for the general purposes of Harvard University; $5,000 to the Massachusetts General Hospital; and in the event of her brother, Judge Holmes, leaving no issue, a further sum of $25,000 to the Boston Medical Library Association.

Bread for Diabetics.—One cup of graham flour, one cup best bran, previously scalded with one cup of boiling water; two eggs; German yeast or baking powder; salt to taste; one cup of milk or water; mix with a spoon. Such a bread contains 17.72 per cent of starch, the equivalent of 19.68 percent sugar.—Dr. Jeffries in *Boston Med. and Surg. Jour.*

Dr. Tyson thinks he has improved this receipt by substituting the gluten flour of the Health Food Company of New York, for the graham flour.

An Effective Method.—M. Langlebert, having succeeded so well in reducing the swelling of acute orchitis by means of the compressing force obtained from a tight-fitting casing of cotton-wool, covered with oil-silk, essayed the same treatment in the case of a well proportioned lady who was suffering from intercostal neuralgia, radiating from the breast. Shortly afterward his patient returned much relieved, but more incensed; the affected breast had diminished to such an extent that it was hardly half the size of the other one!

For the Removal of Freckles.—

℞—Chloride of ammonium, . . . fl℥j.
Hydrochloric acid, ... fl℥jss.
Glycerine, ... fl℥j.
Lait virginal (Lait virginal, French cosmetic, prepared by dropping alcoholic tincture of benzine into water until the mixture becomes perfectly white), . . . fl℥jss.

M. Apply to the freckles morning and evening with a camel's-hair brush. Their complete disappearance is said to be speedy.—*L'Union Medicale*, April 25, 1889.

Damages for Death from Inebriety.—A man in New York drank to intoxication in a saloon, and was drowned on his way home in a small stream. His widow sued the saloon keeper for damages. The jury brought in a verdict for the widow, and on appeal to the Supreme Court, the judgement was confirmed. The judge said the evidence was clear that the death of the plaintiff's husband was caused by his intoxication, arising in whole or in part from the liquor furnished by the defendant. The law in this case was the Civil Damage Act of 1873 of New York State, which provides as follows: "Every husband, wife, child, parent, guardian, employer or other person who shall be injured in person, property or means of support by an intoxicated person, or in consequence of the intoxication, habitual

or otherwise, of any person, shall have a right of action against any person or persons who shall, by selling or giving away intoxicating liquor, have caused the intoxication in whole or in part."

THE CROONIAN LECTURES.—The first of the Croonian Lectures, before the Royal Society of London, has been delivered by M. Roux, on behalf of M. Pasteur, who was ill. The subject was "Preventive Inoculation."

After reviewing the various researches of Pasteur on the subject of chicken-cholera, etc., M. Roux spoke at length on the subject of hydrophobia. He showed, from well-founded and accurate statistics, that the present mortality from mad-dog bites, among those who did not receive treatment, was 15 per cent, while it was only 1 per cent among those who submitted themselves to preventive inoculations.

In terminating, the speaker elucidated the subject of chemical poisons generated by microbes in the course of disease. When these poisons are injected into the blood in large quantities, they induce death rapidly, with all the symptoms of the disease; if in small quantity, on the contrary, they have the effect of vaccination.

ASPIRATION OF THE UTERUS THROUGH THE ABDOMINAL WALL HYDRAMNIOS.—According to M. Olivier, in *Jour. de. Med. de Paris*, in certain cases of pragnancy with a considerable accumulation of fluid in the amnion the distention of the abdomen may be so great that it is difficult, and perhaps even impossible, to make a diagnosis of the case by the ordinary means (palpation, auscultation, etc.). In such cases, when the life of the patient is in peril, one should not hesitate to puncture the amnion through the abdomen, and draw off the extensive secretion; the most rigid antiseptic precautions must be observed, however.

This procedure offers no danger to the mother, but there is a certain amount of risk of inducing abortion by it, though in two cases reported by Lefage and Tillaux, no such complication arose; and in admitting the claim of this danger there is the more weighty consideration that it is necessary above all to save the mother; and furthermore, if one does not interpose, the pregnancy is liable to terminate prematurely, anyhow.

THE REPORT OF THE NOMINATING COMMITTEE OF THE A. M. A. was presented and adopted as follows:

President.—E. M. Moore, of Rochester, N. Y.

Vice-Presidents.—J. W. Jackson, of Missouri; W. W. Kemble, of Minnesota; J. H. Warren, of Massachusetts; T. B. Evans, of Maryland.

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Trustees of the Journal.—T. O. Hooper, of Arkansas; Alonzo Garcelon, of Maine; I. N. Love, of St. Louis; W. W. Dawson, of Cincinnati.

Address in Medicine.—N. S. Davis, of Illinois.

Address in Surgery.—Hunter McGuire, of Richmond.

Address in State Medicine.—A. L. Carrol, of New York.

Committee to fill vacancies in the appointment to deliver General Addresses: Drs. W. Brodie, J. H. Murphy and I. G. Morris.

Place of next meeting, Nashville; Time, the third Tuesday in May.

Chairman of the Committee of Arrangements, W. T. Briggs, of Nashville.

Assistant Secretary, G. C. Savage, of Nashville.

BOOK REVIEWS.

SYNOPSIS OF HUMAN ANATOMY. By James K. Young, M.D., Instructor in Orthopedic Surgery, and Assistant Demonstrator of Surgery in the University of Pennsylvania; Attending Orthopedic Surgeon, Out-Patient Department, University Hospital; Fellow of the College of Physicians, etc.

PHYSICIANS' AND STUDENTS' READY REFERENCE SERIES. F. A. Davis, Philadelphia and London, 1889. Price, $1.40 net.

The purpose of this little work of 375 pages is to place before the over-crowded student and the busy practitioner, in a comprehensive, yet concise manner, all of practical human anatomy. The 76 wood-cuts assist materially in curtailing what would otherwise necessarily be lengthy descriptions. In its preparation the last edition of Gray has been taken as a general standard, though in the special branches, other writers, such as Lusk, Savage, Spiegelberg, Schroeder, Budin, Treves, etc., have been freely drawn on. One, therefore, has the advantage of the views of these various authors without taking the time to consult each of them separately. Moreover, the work is well adapted to freshening up a lapsing store of anatomical knowledge. Tables graphically show the vessels and nerves and their branches.

The book is much more satisfactory than the "remembrances" in vogue, and yet is not too cumbersome to be carried around and read at odd moments—a property which the student will readily appreciate.

CORRESPONDENCE.

NEW YORK, May, 1889.

DEAR DR. BOND.—After having located myself, my first visit was to present my letter of introduction to Dr. J. H. Wyeth, in company with my friend, Dr. T. B. Taylor, formerly of Crystal City, who is staying a few

months in New York and expects to join me during the winter.

Unfortunately Dr. Wyeth's office hours were passed when we reached there, and so we went across the street to Dr. David Webster, to whom I had a letter from our mutual friend, Dr. Thomson.

Found Dr. Webster a very pleasant, social gentleman, who kindly gave me a note to Dr. Gilliam, house-surgeon of the Manhattan Eye and Ear Hospital, and also to Dr. W. T. Bull, one of the consulting surgeons of the New York Hospital. After lunch we wended our way to the Manhattan Eye and Ear Hospital, Park ave., cor. 41st street, as I had promised Dr. Thomson to visit the hospital where he had been house-surgeon previous to his coming to St. Louis. We were very kindly received by Dr. Gilliam and by him introduced to Prof. Roosa, who held a very interesting clinic there at 2 P. M. The waiting-room was filled with 100 to 150 patients, including those for the Eye, Ear and Throat Departments. Dr. Roosa performed two enucleations of the eyeball very quickly and neatly. In one case the interior of the eyeball was disorganized; in the other one, possibly the eye might have been left, as there was not that condition that had been expected on making a section of the removed eye. Yet on the whole it was best, as its removal prevented the occurrence of any reflex or sympathetic irritation of the other eye in the future. Prof. Roosa also passed probes into the nasal duct for stenosis and obstruction of the nasal and lachrymal ducts.

Another very interesting case was presented in which facial paralysis of the left side had come on suddenly. On close examination a history of syphilis was elicited. Prof. Roosa stated that in these cases the paralysis was due to some syphilitic tumor or deposit pressing on the 7th nerve before it leaves the cranium, and in his experience the only remedy was the iodide of potash in large doses; he cautioned, however, not to give in concentrated form, but to dilute largely with water so as not to set up gastric irritation, as in this event the remedy would not be borne, and no result would be obtained. He related a case in which a patient took large quantities of iodide of potash in increasing doses for specific facial paralysis, and that he finally took 460 grains of the iodide three times a day, or 1,380 grains a day before marked improvement took place. In 1876, while interne in the City Hospital, St. Louis, we had a case of specific suppurative ostitis of the right parietal bone for whom the late Dr. Hodgen recommended the iodide in increasing doses. The maximum dose that he finally took was 600 grains a day, and under this dose he recovered. This case of Dr. Roosa shows how much the system may tolerate when certain conditions exist. Along with potash, Prof. Roosa also advised electrical stimulation of the facial muscles, in order, as much as possible, to keep intact their physiological functions.

The clinic of Prof. Roosa was very interesting as a whole, and the clinical material furnished at the Manhattan Eye and Ear Hospital is certainly very extensive, and offers to the student and practitioner vast opportunities for study in diseases of the eye, ear and throat.

I am under obligations to Dr. Gilliam for his courteous attention, as well as to Prof. Roosa, who, by the way, is a very clear and fluent talker, and takes great pains to make himself thoroughly understood by his pupils, for teaching seems to afford him pleasure.

Sunday morning I called on Dr. W. T. Bull and he very kindly extended me an invitation to meet him at the New York Hospital on 5th avenue and 15th street.

Having time on my hands till 2:30 P.M., I called on Dr. Rob't Abbe and found him to be a very agreeable gentleman, as well as an enthusiastic and able surgeon.

Dr. Abbe has within the year employed Senn's method of establishing lateral anastomosis of the bowel by means of approximation plates of decalcified bone.

He has suggested a modification of Senn's method by substituting a ring made of catgut, instead of the bone plates, claiming it to be more easily made at short notice, and that the caliber of the approximated bowel is much larger than is attained by Senn's plates. The Doctor showed me some specimens where he had performed the operation experimentally on dogs, and the result was simply perfect, the entire caliber of the bowel being re-established, which in the specimens shown, was ¾ to 1 inch in diameter. So it seems that Abbe's catgut rings may prove a valuable substitute for Senn's plates. (For description of rings see *N. Y. Med. Jour.*, March 23d, 1889.)

At the appointed hour I met Dr. Bull at the New York Hospital. The hospital is one of the oldest in New York, and the corporation is immensely rich. The hospital is very elegant in all of its appointments, one feature being a glass covered court (solorium) where convalescents can exercise. Another feature is that the kitchen is on the top floor, so that no odors permeate the building. Everything about the wards and halls is kept in the finest of order. Among the interesting cases shown me by Dr. Bull, were two cases of plastic operation for cicatricial contraction following burns. The first case was a child, in which there was contraction of the palm. The cicatricial tissue had first been carefully dissected out, and then a flap was dissected off the anterior portion of the chest, corresponding to the surface denuded on the hand; the base of the flap was left united to the chest and the margins of the flap stitched to the corresponding wound-surfaces of the hand, while the arm was bent against the chest, and firmly fixed by roller bandages over antiseptic dressings. The other case was that of a child where the same operation had been done, the only difference being that the flap was taken from the thigh and the arm extended at the side, and the thigh and pelvis and knee perfectly immobilized by plaster-of-Paris encircling the trunk and thigh. The operations were both done recently, and the flaps of skin were evidently in very good condition, union having taken place, and the result as promising as could be expected. Another interesting case was that

of a child æt. 3 years who had a fracture of both femurs, the feature of interest in this case being the method of treatment.

To the sole of each foot there was a block fastened by adhesive plaster up to the knee and kept in place by roller (same way as in adjusting block and plaster for using Hodgen's splint). The blocks were fastened to a short bar so as to keep the feet about six inches apart. The cross-bar was then, by means of a stout cord, suspended to an iron arm, projecting over the bed, so that the feet were in the air, perpendicularly suspended, the child lying on its back, the thighs being thus elevated at right angles to the trunk of the child. The seat of fracture was steadied by roller bandage (it may also be steadied by slight strips of veneer or lint).

Dr. Roberts, of Philadelphia, reported some cases several years ago treated by this method, but I had never had occasion to practice it, nor had I seen it in practical operation. The little patient was in fine spirits and did not seem to mind it at all, and moved the body about with a great deal of freedom. For fracture of both thighs in children this method presents many practical points to the surgeon.

Among other cases shown was one of sarcoma of the calf of the leg, where an immense amount of tissue had been cut out; a case of resection of the shoulder for enchondroma; excision of the knee for faulty ankylosed position, and a patient on whom had been performed tenotomy of the lateral ligaments of both knees for rheumatic contractures. In one knee the result was good, pursuing an aseptic course. In the other knee, the result was not as good, suppuration having taken place.

Monday morning I again called at Dr. Jno. A. Wyeth's and found him at home. Was given a very cordial reception. After reading my letter of introduction, he very kindly invited me to go with him to the Polyclinic, where he teaches surgery.

There was a class of perhaps 40 present. The case first presented to the class was one of talipes calcaneum, in which the tendon Achilles was lengthened, due to a traumatism of the same. After the patient was placed under anesthesia, Prof. Wyeth applied Esmarch's band age and turniquet, thereby rendering the site of operation perfectly bloodless. A longitudinal incision was made over the tendon and after freeing the tendon from fascia, an inch was cut out with the scalpel. Prof. Wyeth stated that it was of great importance that the cut surfaces should be perfectly smooth and not frizzly, as the tendon was much inclined to frizzle if care were not taken.

The ends were then bent together with three strong silk ligatures. The operation was performed antiseptically. The skin wound was sewed up without leaving opening for draining—in fact, there was no need of it, as the wound was perfectly dry when closed up. Over an antiseptic dressing a plaster dressing covered the limb to above the knee, perfectly immobilizing the limb.

Prof. Wyeth expected also to operate on a case of fistula in ano, but the patient was not ready.

I was much pleased with Prof. Wyeth. What you had told me of him was fully corroborated; he was a very pleasant and amiable gentleman and a careful surgeon.

Promising Prof. Wyeth to call on him on my return from Europe, I bid him adieu, and after lunch went over to St. Luke's where I expected to meet Dr. Abbe. Dr. Abbe was prevented from coming, but in his place Dr. B. Farquhar Curtis came. Dr. Curtis excised a mass of enlarged deep cervical glands from the neck of a young woman. The operation was very tedious, as the doctor dissected the glands out very carefully, applying compression forceps as he went along, thus rendering the operation practically bloodless, although he came down upon the sheath of the cortical artery. The mass was very large and had to be taken out in section—so large that it extended into the posterior triangle of the neck, and necessitated a counter-opening over the posterior border of the sterno cleido-mastoideus in order to get some of the glands out.

I saw one of Dr. Abbe's patients on whom he had performed resection of the spinal luminæ, opening of the dura and secting the spinal nerves; the patient was doing well.

Spinal surgery is one of the new fields in the realm of surgery, and Dr. Abbe is very enthusiastic over his operations thus far. Especially in traumatic injury to the spine where symptoms of compression and paralysis exist, is there opportunity by surgical means to reclaim what thus far has been relegated to the incurable. What surgeon has not seen these sad cases in which the patient pined and slowly wasted away in a paralyzed condition due to an injury of the spine, and who, perhaps, might have been saved from such a miserable end by the intervention of the surgeon's knife? There are also other conditions that may demand operative interference on the spine. The future will certainly develop the possibilities in spinal surgery. I was also shown one of the cases in which Dr. Abbe had performed the operation for establishing lateral anastomosis of the bowel.

Tuesday morning I took a look at the Chambers Street Hospital, which is situated down town in the midst of the business portion of the city and near the wharves.

This is the receiving hospital for the New York Hospital. There are 120 beds and a corps of doctors and ambulances. The young surgeon in charge kindly showed me around. One case was that of a woman who had received a gunshot wound of the abdomen. Laparotomy had been performed and five wounds of the intestine were closed with Lembert sutures. The patient was convalescent, only a portion of the abdominal wound not having healed by first intention. It was at this hospital that Dr. Bull had some of his successful cases of gunshot wounds of the intestine. The conditions under which operations at times must be done at this hospital

are not the most favorable, situated, as the hospital is, in the business part of the city.

Another very interesting case shown me, was that of a painter who had fallen backward on the handle of a paint-brush, the handle penetrating the skull about one inch to the right of the occipital protuberance. The handle of the brush had broken off, a piece over three-fourths of an inch long remaining impacted in the brain. One week after the accident he was brought to the hospital.

The external wound was enlarged and the foreign body found impacted; the skull was trephined, and a quantity of pus was found, an abscess having formed around the foreign body. The symptoms were relieved by the operation. The patient had been in the hospital since the middle of April. A drainage tube was still in the wound, which was granulating nicely.

This patient's case had been one of especial interest to the neurologists. The patient, during the course of his illness, had developed aphasia, as a result of the injury; this was hard to explain on account of the seat of the injury being the cerebellum and far removed from the speech centers of the brain; the only explanation given was that the effect on the speech centers was by *contre coup*.

I spent an hour at the Polyclinic again where I heard Prof. Gerster, the author of the excellent work on "Antiseptic and Aseptic Surgery," deliver an excellent clinical lecture on a patient who was presented to the class. The patient, æt. about 35 years, had a lump in the left side about over the upper border of the middle of the left rib. After going carefully into the history, the conclusion arrived at was that the tumor was a bone tumor, connected with the shaft of the rib, and that it was tuberculous in character. The patient was pale and her physical condition was bad. The speaker dwelt upon the importance of the surgeon being a good physician as well as a surgeon, and that it was of the utmost importance to treat the general condition of the patient, as well as the local condition, observing that he had seen tuberculous conditions improve very much by paying attention to the constitutional treatment of the patient. He did not believe in medicine, but in the proper application of hygienic measures, such as plenty of air, sunlight, and a liberal amount of good food, rich in hydro corbon. He cited several cases in which these measures alone had given wonderful results, and had obviated surgical interference.

The pathology of tuberculosis in bone was dwelt upon and very clearly elucidated. Prof. Gerster is a very fluent and clear speaker, and I was well paid for the time spent.

New York affords a vast amount of material for clinical study in its numerous hospitals and clinics. The men engaged in teaching are earnest in their work and are adding their share toward developing and improving the opportunity for the study of medicine and surgery in America. Eventually the time will come when our institutions will bear comparison with those of the Continent.

As I sail to-morrow, I will have to bring this to a close, and will write you next when I reach the other side.

A. H. Meisenbach.

SOCIETY PROCEEDINGS.

MISSOURI STATE MEDICAL ASSOCIATION, MAY 21st AND 22nd, 1889.

The President, Dr. A. W. McAlester, in the chair.

[continued from page 712].

A Contribution to the Study of Traumatic Neuroses (Railway Spine).

BY DR. L. BREMER, ST. LOUIS.

The author referred first to the present status of knowledge regarding the affection called "Railway Spine," lamenting the little progress that had been made in that direction, mainly because of the lack of post-mortem examinations of persons who had suffered from that disease. But at the same time he claimed much in the direction of clearing away, by recent investigators, much of the superstitious rubbish that had long clung to the subject.

Erichsen had first called attention to the malady. Hammond had advanced the anemia and hyperemia theory of its pathological nature, and Page had done much to show the utter worthlessness of this theory. Recently Charcot, of France, and Oppenheim, of Berlin, have done much toward elucidating the subject, and on the basis of their researches and writings, the reader defined the disease as being a "traumatic neurasthenia, an enfeeblement of all the functions, or, to use a less prejudicial term, 'traumatic neurosis,' resulting from railway collisions and from any injuries, especially of the head, which at the time of their reception are accompanied by fright and alarm. The one requisite is utter absence of any objective sign pointing to a coarse or demonstrable microscopical change in the cortical nervous system."

The history of a typical case of the affection was then detailed, showing the multitudinous ways in which it manifests itself, notwithstanding the absence of external evidences of the primary injury. The fallacy of always attributing the existence of these injuries and apparently conflicting symptoms to a disposition on the part of the patient toward malingering, even though the manifestations of such symptoms as paralysis, for instance, be anomalous, was shown by the history of another case, which the author had observed at intervals during a protracted period of time. Charcot and Oppenheim explained this curious fact by the theory of auto-suggestion. The morbidly altered mind, fixed with hypochondrical anxiety on the most minute symptoms which may supervene in the course of the malady, will,

through fear and apprehension, exaggerate any little weakness in the lower extremities, and the average patient, not being acquainted with the law of decussation of the conducting nerve tracts, will locate, and by fixed attention, intensify the trouble on the side of the head-injury. The hysterical element becomes thus apparent. But it would be an error to put a motor disturbance of such a character down as insignificant, since it is well known that a hysterical paralysis may be as grave and lasting as that due to coarse lesions.

Ehrenmeyer, in his review of Oppenheim's book, even goes so far as to say that equilateral paralysis in unilateral lesions of the head, is pathognomonic of traumatic neuroses. There are cases which by the gravity of the symptoms and their sudden disappearance, are apt to astonish the medical practitioner, and although he may not have heard of Charcot's male-hysteria, will suggest to him hysterical exaggeration. Here a case was recalled by the author which well illustrated this fact. While admitting that hosts of malingerers impose on the railroads by their drummed-up claims of permanent disability from injuries, Dr. Bremer did not lose sight of the fact that exceptionally the reverse was true; that an honest sufferer was sometimes wronged because his counsel did not understand to lay before the testifying physician proper questions to elucidate the nature of the nerve trouble for which the plaintiff asked damages. Such a man is apt to appear as an impostor, especially when the counsel for the defendant knows how to take advantage of the mental weakness of the plaintiff.

The influence of laws and litigation in multiplying the number of alleged accident-victims was forcibly shown. It was claimed that railroad men, because of their occupation, were especially predisposed to neurasthenia, to dynamic injuries of the nervous system in case of collision.

As to the treatment of traumatic neuroses, Dr. Bremer strongly deprecated the resort to cranial surgery, or the removal of scars, etc., that were supposed to give rise to the manifold symptoms. "After the labors and laws laid down by such men as Horseley, Bramwell, Bergmann and others, no surgeon should entertain even the slightest idea of operative interference in traumatic neuroses; even in distinctly localizing brain-lesions producing general symptoms, epilepsy, for instance, the results so far obtained are by no means promising. Such operations have as a rule an ephemeral effect; the original trouble returns after months or weeks, unfortunately, after the description of the case with the result "cure" has been given to the medical press, and in some instances to the daily papers. We must not forget that operations of all kinds, and the forced rest which they entail, exert a powerful influence on all kinds of neuroses, especially epilepsy, but they do not cure.

What then is to be done for the unfortunates that suffer from any form of these traumatic neuroses? The great healing agents, time, and a hygienic mode of living, may be assisted by the judicious application of a weak galvanic current and cold water. "It is astonishing how prompt the improvement is in some cases, up to a certain point, if galvanism to the head be employed, and how cold water ablutions will tone up the nerves; but I repeat it, the outlook as to complete recovery of the former vigor and soundness of the nervous system is extremely problematical."

Discussion.

Dr. A. B. Shaw.—I must enter a protest against the terming of these injuries, these railway concussions, as traumatic neuroses; for I believe that we have as a substratum identically the same minute extravasation that we have in other injuries of the nervous system. I believe that we will ultimately find, because of the simple contact, whether traumatism from the railroad or any other kind of shock, as the result, a sub-stratum, a sclerosis, the result of the multitudinous involvement of these arteries in the structural changes.

The man loses his mental tone, becomes irritable, loses his memory; frequently hallucinations occur; we have impotence and diseased conditions of the bladder, which are not to be found in connection with the hysterical state.

Dr. Fryor.—I wish to relate a case which should serve to strengthen the belief that there is such a disease as railroad spine. A surgeon of the army, a man of large build, free from imagination of any kind, in stepping off a car in motion, was struck on the back by a part of the platform; he fell to the ground; his head was not injured, was not even struck. He was carried to a building near by, suffering the most acute hyperasthesia. He never lost consciousness, nor had he any mental aberration at any time. I saw him ten days afterward, when he was sitting without any clothing about him; there was at that time considerable hyperesthesia, so that if a person would walk across the floor he would shriek with agony. There was vesication all over the body, except the face and neck. The after-history of the case I am not able to give. Here we had a vesication all over the body to show that it was not simply a fancied disease.

Dr. Mulhall.—Dr. Bremer has tried to show how valueless the testimony of the expert may be. The rule works both ways; it might show how valueless may be the testimony of the neurologist. I gather from what has been said that a railway injury may make a man hysterical, and as a consequence he may get aphonia, just as a hysterical woman can. But in the case in question the conclusion arrived at was not based on the subjective evidence, but it was based on the objective examination.

In the case which Dr. Shaw mentioned, I proved that this man's cords could approximate perfectly. What more do you want to produce a voice than for the cords to approximate and have a blast of air behind them? He could cough, and I said for that reason he was a malingerer.

Dr. Alt said he was a liar, because of the result of the prism-test. It is a sure test. When he should have

seen two images and only saw one he must have lied.

It was claimed that pins could be stuck into him and he would not move, but when I applied a pin, when he was not expecting it, his legs jumped a foot high. If he was not a malingerer in some respect he was in another. The golden rule has helped to prove it; that is, the money that he got for being so affected. The doctor states that he is now walking around.

Dr. Bremer.—When a person is capable of approximating the vocal cords it is not proved thereby that he is capable of making use of the cords by bringing the volume of air into operation by the respiratory muscles in such a way that there is phonation. These are two distinct cases. There may be paralysis as there is in hysterical patients. Why is it that such patients are paralyzed on one side? Such patients are in a diseased nervous state, which approximates hypnotism. The fact that he is paralyzed on one side suggests the idea to him that he should be paralyzed on the other. It is in this way that the person becomes a paralytic.

Again, as to the test of the reflexes, the needle being thrust into the leg when a person is not capable of moving: That is a symptom which I have seen in a number of cases. In a case of acute ascending paralysis, a boy could not move the leg or toe, but as soon as you would stick a pin into the leg when he was not thinking, he would throw it out. He was not a malingerer. There was a hitch between the brain and the spinal cord.

Dr. Shaw has explained it on the embolic theory, with which I do not concur.

As to anemia and hyperemia, I certainly do not for a moment doubt that there are hyperemic and anemic states of the nervous system. There is hyperemia of the skin, and why not of the nervous system? The point is, is the hyperemia an ontological substance? Is the symptom proved?

Here is a man paralyzed. Can we tell him that he has congestion of the spine? The greatest neurologists mix up constantly hyperemia and anemia. We have to eliminate such terms as anemia and hyperemia, denoting an unalterable pathological state; either one may occur several times a day, but the reaction will always come. There will be hyperemic paralysis following the spasm, and therefore there is no such thing as hyperemia or anemia, expressing a distinct pathological state of the spinal cord.

Cases of Insanity.

BY B. E. YOUNG, M.D., NEVADA.

If we regard the mind as an entity, the cause of its disease will be more difficult to comprehend; but if we regard it as a phenomenon or immaterial manifestation of some organ, and we can locate the organ, then the field of knowledge in that direction promises sooner or later to open up to earnest and persistent investigation. The cerebral cortex is the most highly organized of natural structures, and in its highest type the least subject to disease and disorganization. And still, it is, like all else mortal, subject to changes, degeneration and death.

As the cortex is the "conservator of all other organs," it necessarily follows that their diseases and injuries are reflected upon it, disturbing its functional activity and in many cases, where the distinct affection is long continued, producing organic changes in its structure, from change in the blood supply, or the debris resulting from molecular activity remaining too long, or rapidity of cell action, may one or all result in mental derangement. Imperfections in cortical structure may be hereditary, or they may occur by arrested development between birth and maturity.

The reader furnished with his paper a list of the most prevalent causes of insanity, taken from reports from the various asylums in the United States. Dividing them into physical and mental causes, it was found that to the former may be attributed 9,858 cases of insanity, while to the latter (moral) might be attributed 4,611 cases. Of the physical causes, heredity heads the list with 746; with epilepsy a close second, 679. Of the moral causes, domestic trouble is most prevalent, having 948 cases to its credit; emotional excitement 913, and religious excitement, 742.

Insanity, according to the reader, seems to depend upon a cortex which was originally below the normal standard, or has been rendered so either by on arrested development, disease or some unfavorable circumstance. Such a cortex coming in contact with those incidents of life which befall all humanity, fails to evolve the normal mental phenomena; or, in other words, people possessing such cortices are subject to insanity from any of a thousand and one accidents which befall mortals.

SELECTIONS.

FORTIETH ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION HELD AT NEWPORT, R. I.

The New York *Medical Record* displays its usual commendable enterprise by presenting a synopsis of the proceedings of the recent meeting of the American Medical Association. From its extensive report we borrow abstracts of some of the especially interesting papers.

Section of the Practice of Medicine, Materia Medica and Physiology.

Dr. I. E. Atkinson, of Baltimore, read a paper on

SOME OF THE RARER AND GRAVER FORMS OF CINCHONISM.

Cinchona and its allies are generally given without regard to idiosyncrasies. Intoxication, etc., which may occur as the result of cinchonism, may be very grave. The absolute frequency of cinchonism is not great, but worthy of notice. He had collected over 50 cases of quinine amaurosis, in which the blindness was present in nearly all. The vision is often affected without suspicion of the drug. In most cases the blindness occurs

suddenly, but in many cases it may be gradual. It may occur within 24 hours. In all, or nearly all cases, the sight returns, but the eyes are often affected for a longer time, even after two years, and color-blindness often permanently results. The blindness is almost complete, the color-blindness is marked for a long time; the pupils are much dilated, the disks are white and pallid; there is contraction of the visual field; impairment of hearing is often noticed; some patients have anesthesia of the cornea, strabismus, etc. Knapp showed that relapses may occur with very small doses. The pathogenesis of quinine amaurosis is not at all understood, although many explanations have been offered. The dose of quinine sufficient to produce blindness is very variable. H. C. Wood had seen it after doses of 12 grains. Blindness always results when the doses are lethal. Immense doses are taken without causing blindness, so that it undoubtedly occurs as an idiosyncrasy. Tinnitus aurium is common, but permanent deafness has never been recorded, even complete temporary deafness has probably never been observed. In those already deaf this deafness may be increased. In the ear there is much anemia. Enormous doses of quinine are necessary to produce death, and fatal cases of cynchonism have rarely been recorded. The cardiac conditions described in the autopsies of the various fatal cases are very dissimilar. Sufficient attention has not been given to the dangerous and toxic effects of quinine in large doses.

Dr. J. Tyson, of Philadelphia, read a paper entitled

THE INDUCTION OF PREMATURE LABOR IN BRIGHT'S DISEASE.

We should bring on premature labor: 1, In cases of Bright's disease where in previous pregnancies the symptoms had been extremely severe and dangerous; 2, in all primiparæ in whom there is Bright's disease previous to pregnancy; 3, those in which we have not the knowledge acquired in the previous cases. A large number of such cases terminate by miscarriage, and terminate well for the mother. It might not be a bad idea to examine the urine of every woman before marriage. A few cases may progress to full term without fatal issue, but these are exceptional cases. Each case must be decided on its own merits.

Dr. V. C. Vaughan, of Ann Arbor, Mich., thought the points raised by the speaker were very important, and his experience taught him to do the same, except in the case of primiparæ, where diet can do much by limiting the amount of proteid food.

Dr. I. E. Atkinson thought it was a bad precedent. In the primiparæ we get the most terrrible results, and in his experience it was the contracted kidney which was the most to be dreaded. He waited in some cases until mild symptoms showed themselves, and then he brought about premature labor.

Dr. W. J. Scott, of Cleveland, O., did not think it was well to formulate such a rule, in every case, as Dr. Tyson suggested.

Dr. Carpenter, of Pottsville, also recorded his experience as against producing premature labor in primiparæ. He found bleeding and purging an efficient remedy.

Dr. J. G. Truax, of New York, said that his experience was that the patient would not submit to induction of premature labor if she did not feel badly, and this is especially true in case of a mother desirous of offspring.

Dr. J. C. Wilson, of Philadelphia, thought the early recognition of the renal trouble was important, and that therefore the earliest possible examination of the urine should be made.

Dr. Tyson did not mean to say that premature labor should be induced in every primipara, but that in primiparæ it was very dangerous.

SECTION ON SURGERY AND ANATOMY.

Dr. N. P. Dandridge, of Cincinnati, Chairman of the Section, read a paper on

SURGICAL INTERFERENCE IN FRACTURES OF THE SPINE.

The recent interest in the surgery of the spine dates from the removal of a tumor of the the cord by Horsley, and the operation by Macewen for the relief of paralysis, in Pott's disease.

In applying the results to fracture, it must be remembered that, in cases of tumor, operation is the only method of treatment which promises any benefit. In Pott's disease paralytic symptoms often disappear, even after long continuance, and in one personal case, complete paraplegia lasting for more than three years and a half was finally relieved. Very often, however, the thickening of tissue making pressure on the cord, resembles permanence, a tumor growth, and removal by the knife offers the only prospect of relief. The result of trephining the spinal canal, in these cases, has given most brilliant results; recovery taking place in one case of Horsley's after six or seven years of paralysis, and in one of Macewen's after two years. The analogy of these cases and fracture must be applied with caution. In fracture the damage done to the chord is often immediate, and is not often due to continued pressure from narrowing the canal by displaced bone. Following fracture, however, we may have pressure produced by inflammatory products, which may assist in continuing the symptoms. In discussing the propriety of operation it is proper to consider the results obtained in fracture of the spine without operative interference. Burrill has shown that 21% survive, and one half of these make satisfactory recovery. It is apparent from these figures that a considerable number of cases are brought to a satisfactory termination, and in these the symptoms of paralysis, bedsores and incontinence do not show any evidence of improvement for weeks after the injury.

In five cases of fracture of the dorsal spine under the writer's care, the plaster jacket was applied in three soon after the injury—in two with a satisfactory result and complete disappearance of paralysis. In the third, the recovery was only partial. In these cases the plaster jacket was applied by the hammock suspension, as suggested first by Mr. Davy. In one case suspension

was employed five months after the fracture, and was followed by marked benefit. The fifth case was trephined, and the tenth, eleventh and twelfth dorsal, and first lumbar lamina removed at the end of five months, for the relief of complete paraplegia, cystitis, incontinence of urine and feces, and extensive bedsores. No apparent immediate benefit followed the operation, but eight weeks later the cystitis had disappeared, some of the bedsores were entirely healed and all were better, and the general condition was improved. In fracture of the spine immediate operation is not indicated, as a considerable portion of cases recover under less dangerous methods of treatment. The continuance of symptoms is an indication for operation, as it has been conclusively shown that the relief of pressure, even after long continuance, may be followed by complete restoration.

CONCLUSIONS.

1. In fractures of the cervical vertebræ, there is indicated immediate reduction of any displacement by extension and manipulation under an anesthetic, followed by continuous extension and immobilization.

2. In all fractures of the lumbar or dorsal spine, involving the bodies or the arches, reduction is effected, with or without the plaster jacket, by the hammock suspension, preceded, if there is evident displacement, by extension under an anesthetic.

3. When symptoms indicating injury of the cord persist without improvement, resection is indicated.

4. Immediate operation would be indicated when there is marked depression of the arches with symptoms of paralysis.

5. Long continuance of the symptoms is not in itself a contra-indication to operation.

6. We have, in suspension, the means of alleviating some of the sequelæ of fracture of the spine.

Dr. H. H. Smith, of Philadelphia, read a paper on

CONCUSSION OF THE SPINE IN ITS MEDICO LEGAL ASPECTS.

The legal liability of corporations and capitalists for claims of pecuniary damages for injuries received by individuals through a claimed negligence, was established by the English Parliament, in 1846, and is known as Lord Campbell's Liability Act.

A refusal to pay often carries the claim into court, and the medical testimony often becomes the turning-point of the case. A medical expert should, therefore, endeavor to hold the scales so level that the preponderence of the medical facts may correctly incline the balance to the right side. The following questions were presented:

1. Can any force be so applied as to produce concussion of the spinal cord and its nerves?

2. How are the normal functions of the cord disturbed by such injuries?

3. What pathological changes on the cord are found as due to its injury or disease? After answering these questions, the following conclusions were drawn:

1. Concussion of the spinal cord is no longer doubtful, but may occur from any marked violence, there being nothing peculiar in the application of force to the body as the result of railway derailment or collision.

2. The pathological changes noted in the molecular structure of the cord, as the result of shaking, etc., when attended by paralysis in any degree, may be due to hemorrhagic effusions, softening, and localized or limited atrophy.

3. The possibility of pre existing neurasthenia, hysteria or fraud, should be carefully noted in forming a diagnosis.

4. The prognosis should be guarded, especially in cases claiming permanent disability, as recoveries or marked improvement in a few weeks are recorded, even after the occurrence of paralysis.

5. No physician should go into court and swear that a plaintiff has had a concussion of the spine or its nerves, unless he has proved the disturbance of the normal functions of the cord as shown in sensation or motion, or both, and that the symptoms appeared soon after the injury.

Dr. Charles C. Hunt, of Dixon, Ill., read a paper on

SUSPENSION AND EXTENSION IN THE TREATMENT OF SCIATICA.

The three cardinal points in the treatment of sciatica are rest, extension and suspension. He cites five cases, picked at random from a list extending over a period of five years. Recovery took place in from two to six weeks in all. The apparatus used was the old Hodgen splint, which should be worn at least two weeks, and the adhesive straps left on two or three weeks longer, so that extension can be put on after the patient goes to bed nights, or in case of accident or over-exertion. The paper consists of a few interesting clinical facts, no pretension being made to discuss etiology, pathology, diagnosis or general treatment. A cut of the apparatus, with description and method of applying it, accompanies the paper

Dr. Dudley P. Allen, of Cleveland, Ohio, read a paper on

LITHOLAPAXY IN CHILDREN

in which he said that this operation had now come to occupy a recognized position among the operations for stone upon children and had achieved a great success.

He compared it with the operation of lateral suprapubic lithotomy, and pointed out the comparative merits of each operation. He also read letters from G. Buxton Brown, of London; Guyon, of Paris; Kerr, of Canton, China, and Petersen, of Kiel, Germany. Brown and Guyon are favorable to litholapaxy in children under proper conditions. Kerr and Petersen had not attempted litholapaxy in children, always cutting; Petersen wrote especially of suprapubic lithotomy in cases where it was indicated; and Kerr, of the advantages of median lithotomy in small stones.

Dr. Allen's conclusions were that litholapaxy in children is adapted especially in median and small stones, and that its especial advantages are:

1. The absence of a cutting operation for dread of

which the patients frequently delay operation until the stones have reached a large size.

2. The short convalesence, averaging but a few days.

3. The absence of the offensive discharge of urine into the patient's bed, with its disagreeable and sometimes evil consequences. He also spoke of the absence of any risk to the reproductive apparatus, and the fact that boys' bladders were less liable to be diseased than adults' and consequently better able to withstand operation. He advocated treatment of the systitis which accompanies stone by washing the bladder for a time after the operation, should this be indicated, and expressed the opinion that this would secure as beneficial results to the bladder as drainage by the cutting operation. He thought that, even if the stone returned more frequently after litholapaxy than after lithotomy (as was not proved to be the case), this might be prevented by washing the bladder until its condition had become healthy, and should a stone return a second operation by litholapaxy would be easier than the first from the increase in size of the urethra with the age of the patient. In concluding his remarks he showed various instruments and stones removed by the operation.

Dr. W. T. Briggs, of Nashville, Tenn., read a paper on

THE CHOICE OF OPERATION FOR THE REMOVAL OF VESICAL CALCULI IN THE MALE.

There is no best operation for the extraction of urinary calculi. Every case of stone has its special indications, and the best results will be obtained by the surgeon who has a thoroughly practical knowledge of all plans of operating, and who appreciates the paramount importance of selecting the operation best adopted to the case under consideration.

The data from which a choice is determined are:

1. The age of the patient.
2. Size and consistence of the stone.
3. The recurrence of the stone.
4. Condition of the urinary apparatus.
5. The results of the different methods.

It is almost universally conceded that in children under sixteen years of age lithotomy is one of the most successful of the major operations. The writer had operated on seventy-one children by the medio-bilateral method, and all fully recovered.

The writer thinks it may be safely concluded that in children under sixteen years of age the cutting method should be chosen, as the safer and better method of removing vesical calculi.

After puberty, and even in advanced age, crushing is the operation par excellence, and when the environments of the case have been favorable it has proven eminently successful.

The various methods of operation were discussed.

The medio-bilateral method is the choice of the writer, for the following reasons:

1. That it opens up the shortest and most direct route to the bladder, passing in a straight line from one-third of an inch anterior to the verge of the anus to the neck of the bladder; it facilitates the introduction of instruments and the extraction of the calculi.

2. It divides parts of the least importance. The incision following the median line does not encounter any structure of importance, nor does the slightest bilateral section of the deeper parts do violence to tissues of vital consequence.

The following deductions were drawn:

1. No operation is adapted to all cases.
2. Litholapaxy is incomparably superior to lithotrity, and should always be practiced in selected cases.
3. The suprapubic should always be chosen for extraction of very large and hard stones.
4. The medio-bilateral should be chosen in all other cases.

In adult life the death-rates alter somewhat in favor of litholapaxy. As the prostate and urethra enlarge, and the parts about the neck of the bladder become more vascular, the danger incident to cutting through them increases. On the other hand, the increase in the size of the parts makes the performance of litholapaxy comparatively easy and safe. In old age the rates of mortality are overwhelmingly in favor of litholapaxy. While the dangers attending all the cutting operations have increased very greatly, the mortality after crushing is very little higher than it was earlier in life.

In childhood it would seem wise to use litholapaxy for all small stones or stones of moderate size, and for stones of larger than this to do lateral lithotomy except when they are very large and then suprabubic cystotomy is to be resorted to.

In adults we are led to regard litholapaxy as the operation of choice for stone-removal. In old age the same indications are to be followed as in the adult, except that it is to be remembered that perineal incisions are especially dangerous in old men, and not to be undertaken for the removal of stone without urgent reasons.

Inoculation of Tuberculosis on Healthy Mucous Membranes.—Dr. Cornet, of Reichenhall, has inoculated in dogs, Koch's bacillus, so as to be able to study the mechanism of infection which produces tubercular or scrofulous adenitis in man. His experiments showed that the ganglia of the region through which the virus had penetrated are always involved first; this explains the frequency of tubercular cervical adenitis in man. The parts which surround the neck, the nasal and buccal mucous membranes, the ocular conjunctiva, and the ear, are favorable places for the penetration of the pathogenic germs into the tissues. The gangalia of the side corresponding to the infection are involved first, after which the glands of the opposite side are infected. His inoculations have given him positive results, not only when he had to deal with a spontaneously or artificially ulcerated mucous membrane, but even when he inoculated by simple friction of an intact mucous membrane.—*Med. News.*

ORIGINAL ARTICLES.

EXTERNAL URETHROTOMY COMBINED WITH INTERNAL URETHROTOMY.

BY E. VON QUAST, M.D., KANSAS CITY, MO.

Read before the Missouri State Medical Society, May 22, 1889.

External urethrotomy, also called perineal section, has been known since 1652; it was perfected by John Hunter in 1783 but was rarely performed up to 1844, when Syme advocated it in some exceptional cases, in which, for instance, although a catheter can be passed into the bladder, no other treatment has afforded sufficient permanent relief. Abandoned again, because proofs of permanent benefit were insufficient, and because men of such prominence as Sir Henry Thompson and Sir Andrew Clark of England, and Drs. Keyes and Otis in this country, taught that "few, if any, strictures existed, through which, if urine issues externally, a catheter of sufficient size may not be passed, in the course of time, with gentleness, care and skill. They resorted to divulsion, continued or interrupted dilatation, and internal urethrotomy, which latter, through genius and mechanical skill, was so perfected that to day it is preferred to the exclusion of almost every other method in the pendulous portion of the urethra, and numbers among its converts even Mr. Thompson.

Otis recommends division of strictures in the membranous urethra by his curved urethrotome without previous dilatation, and then separates the bars, thus tearing all contractions. This, however, is a hazardous undertaking, which has been followed by serious consequences, and ought not to be recommended. But there are cases of old,dense,cartilaginous strictures, often produced by traumatism, strictures where the narrowing is so complete that it reduces micturition to dribbling, and where only the smallest and most delicate instruments are applicable, and when the urethra cannot be dilated beyond a certain point, owing to the conversion of its walls into dense cicatricial tissue, which you may cut through, but which you cannot destroy by any instruments. There are cases where we have perineal fistulas with a dilated urethra behind, complicated with prostititis and cystitis, and when the pitiable condition of the patient demands a more thorough and complete operation than any of those before mentioned. In these cases I think no operation is preferable to Syme's, and if a stricture has gotten into such a condition as to demand internal urethrotomy, the patient is considered safe at once and will be permanently benefitted, if, at the same time, temporary urine drainage has been made by perineal puncture.

Mr. Reginald Harrison struck the keynote on this subject in his Lettsomian lectures and pointed out for its advantages:

1. Prevention of urethral fever and its complications.
2. Thorough drainage.
3. Cure of cystitis.
4. Permanent improvement.

The correctness of this statement I can verify by the report of two cases operated on by myself in this last year.

CASE I. H. L., æt. 38, American, merchant, has been suffering from stricture of the bulbous urethra as a sequel to gonorrhea for about 18 years;was operated on by Thompson's divulsor, 8 years ago. This was followed by severe rigors which confined him to his bed for over a month, thus preventing the successful treatment by gradual dilatation. Another attempt by a surgeon 4 years ago had similar results, and possibly caused, in addition, a false passage. His condition became worse and worse, fistulas had formed on the subpubic portion of the urethra, out of which part of the urine escaped at every micturition. Induration was very marked at the junction of the membranous and bulbous urethra, also along part of the pendulous urethra; urine only dribbled away from the meatus. Examination revealed a stricture an inch behind the meatus, through which only a whalebone guide would pass. Deeper in, the fistulous urethra was dilated and cystitis existed to an alarming extent. His condition demanded relief to his bladder, which probably had not been emptied of urates and decomposed urine for a long time. His former experience with divulsion and dilatation warned me against resorting to it again without an independent urine-drainage.

Preparing him for the operation I followed the advice Prof. Palmer, of Louisville, of previously sterilizing the urine, nd gave him

℞	Acidi boracici,	ʒj.
	Sodæ biborat.,	ʒij.
	Aquæ menth. pip.,	℥v.
	Syr. simpl.,	℥j.

M. A tablespoonful every four hours.

He took this medicine about four days, when he was put under chloroform, placed in lithotomy position and the strictures in the penile and bulbous urethra divided with Otis' dilating urethrotome to No. 34 F. This urethrotome I prefer to all others, except Banks', for strictures at or near the meatus. Wyeth's addition of the ratchet insures safety in cutting through very extensive strictures. The urethra being sufficiently opened, Syme's staff was passed well through the stricture and held by an assistant. The perineum was thoroughly shaved and washed with a bichloride solution, the scrotum held out of the way by an assistant, and an incision was made directly on the median line through the raphe, dissecting carefully, layer after layer,thus avoiding the artery of the bulb which lies outside of the raphe. All hemorrhage controlled, the staff was taken in the left hand, while, with the right index finger, the groove was felt for and the urethra punctured. A gush

of urine indicated its entrance. The incision was sufficiently enlarged to permit digital exploration to find all cicatricial bands, which were dissected out. A catheter was introduced into the bladder and the viscus thoroughly washed out with a warm solution of bichloride of mercury, 1:8000. An iodoform emulsion was injected into the urethra and well rubbed in, when the internal incision was made. The patient rallied well, no urethral chill or hemorrhage occurred; temperature never rose above 99.5°, and that but once on the third day, due to surgical fever. The after treatment consisted in thoroughly cleansing urethra and perineal wound with Thiersch's solution and the introduction of full sized silver sounds every 3 or 4 days. No untoward symptoms followed; patient left his bed in ten days. Urine escaped for some time by perineal incision, then partly by it and meatus, finally perineal wound closed at the end of 3 months, and he is now in better health than he has been in 18 years.

Case II. W. B., æt. 43, colored, injured his perineum first in 1878 on the pummel of his saddle, which gave him a good deal of pain on urinating, and a sensitive swelling remained. He noticed occasional difficulty in urinating, which increased very much. He hurt himself again a year later, while riding a bucking mule. From this time on he suffered more or less, stream of urine got smaller and induration in perineum increased, but still he did not seek medical advice. His bladder began to pain him a good deal; urine was thick and cloudy, and it took a good while to finish micturition.

Finally, on July 8, 1888, after a long journey on the cars, while attempting to urinate, he felt a sudden giving away and an apparent relief. But very little urine passed from the meatus; his feeling of relief was followed by a stinging sensation in the perineum and scrotum, which began to swell rapidly. He took a chill and felt very ill for hours, and on the 10th sent for a physician, who advised him to send for me. When I first saw him, July 13, late at night, four days after the accident, I found the perineum and scrotum enormously swollen, a crackling, edematous mass, covered with a putrid slough, the scrotal tissue gangrenous, with lines of demarkation. The constitutional symptoms were alarming, temperature, 103°, pulse 130. He had occasional rigors, and very little urine passed for two days. There had been evidently a rupture of the membranous urethra just behind the triangular ligament; this had been followed by extravasation of urine which had destroyed the areolar tissue. The penis itself was edematous, and meatus very small. I determined at once to perform complete division of all strictured parts by the combined method, dissection of all dead tissue and thorough drainage and disinfection of affected parts. This was the only remedy, and the patient readily consented to it.

The day being too far advanced, I ordered an yeast poultice to perineum and scrotum, and operated July 14, early in the morning. Chloroform having been administered, the patient was placed in the lithotomy position, meatotomy and internal urethrotomy performed to No. 34 F. I then carried a Syme's staff down to the membranous urethra and freely opened the perineal swelling down to and into the urethra with a bistoury, made several incisions into the edematous scrotum and dissected out all dead and cicatricial tissue. The discharge of fetid pus and decomposed urine that followed clearly proved the correctness of my diagnosis. In exploring the deep urethra I found an enlarged and diseased prostate gland. A catheter was introduced into the bladder and thoroughly washed out with a solution of bichloride of mercury, 1:8000, an iodoform emulsion was injected into the urethra, and all denuded surfaces thoroughly dusted over with iodoform; gauze, absorbent cotton and a T-bandage completed the dressing. Patient was instructed to pass urine into a bedpan, and renew all dressings when soiled. I ordered quinine, stimulants, and the best of nourishment—morphine only when suffering extreme pain. The hemorrhage was slight, and the recovery from the immediate effects of operation and anesthetic good. In 48 hours all bad odor had disappeared, sloughing stopped entirely, edema of scrotum greatly decreased; temperature, 100°, pulse, 90; kept falling rapidly to normal, which it reached on the 9th day, and never arose again. The parts were thoroughly douched daily with Thiersch's solution to stimulate granulation. The bladder was washed out daily with a biborate solution till urine became clear. The wound in the scrotum soon became covered with healthy granulations, and reduced its redundancy. The wound in the perineum grew smaller gradually, urine soon passed partly by meatus. Full sized sounds were used regularly from the third day on. On account of the extensive wound on the urethra, however, it took a good many months, and finally left a small opening covered over with epithelium which necessitated a urethroplastic operation to close it. This was done by paring the edges of the wound thoroughly, and drawing them together with interrupted silk sutures; urine was drawn off every 6 to 8 hours. Some of the stitches unfortunately gave way and it was necessary to allow healing to go on by second intention. The caliber of his urethra has remained 34 F.

External urethrotomy is not free from evils, and not all cases terminate as well as these two reported. I myself had a fatal case some ten years ago in an old man in Dunklin County, on whom I operated for extravasation of urine. The cause in his case had been gravel, which obstructed the membranous urethra, had possibly gradually increased in size till it produced follicular urethritis, sloughing and perforation of its walls. The ravages of decomposed urine had, however, been too much for his constitution and completely destroyed the surrounding tissue. He died with typhoid symptoms.

To insure permanent success in the operation it is necessary to

1. Divide and remove all cicatricial bands and tissue.
2. To introduce sounds every 3 or 4 days till wound is healed, and then occasionally to insure a fair caliber.

Thompson leaves a catheter in the urethra for some days, but this ought to be omitted, as its presence causes discomfort to the patient, and is more apt to produce chill and cystitis of the neck, and urine will dribble along by side of it and come in contact with the cut surface anyway. Patients often get up on the 8th day, which they surely could not do if catheter had been tied in for several days. The results as to life are very satisfactory; it is only occasionally that an incurable fistulous opening is left in the perineum. Those who oppose it contend that incision through the urethra contracts and thus lessens its diameter, but post mortem examinations of patients who have died some years afterward have shown this to be groundless, the cicatrix being linear and scarcely perceptible. In rupture of the urethra with extravasation of urine, free incision is the only remedy to save the patient's life. The results of this injury are so terrible as to speedily produce death if operation is put off. It is remarkable how rapid the destruction is, and if the patient survives the effect, how rapidly reparation goes on in this region.

KYPHOSIS AS CAUSED BY FRACTURE.

BY R. S. KELSO, A.B., M D., JOPLIN, MO.

The term kyphosis is from the Greek kupos, signifying 'gibbons'; it originally had reference rather to the deformity than to the disease producing it; it is now however used to designate a disease of the spinal column characterized by caries of one or more of the vertebral bodies with the attendant changes leading to deformity.

This disease has also been designated by other terms, as antero-posterior curvature, spondilitis, malum Pottii, Pott's disease, angular curvature, etc., and some one fond of Greek roots has discovered that its nature and chief characteristics are admirably expressed by the word 'spondylarthrocace'.

The deformity from this disease was known and well described at least 3,000 years ago, and has given rise to many legends of "hunchbacks," to whom were attributed great mental as well as physical deformities. Hippocrates describes it and states that it is caused by tubercles within and without the lungs.

Something over 100 years ago, Percival Pott, an eminent English surgeon, by whose name the disease is commonly called, wrote an exhaustive treatise on it, in which he held that caries of the spine was the invariable cause. Selpech, who wrote many years later, substantially agrees with him, but taught that the caries was caused by tuberculosis or scrofula. He claimed that the tuberculous matter is deposited within the cancellous tissue of the bodies of the vertebræ, absorbing and weakening this structure to such a degree that it is unable to sustain the superincumbent weight, when it crushes, giving rise suddenly or gradually to posterior curvature. Other authors followed with nearly the same views, and all agreed that the disease has its origin in tuberculous deposit, followed by softening and caries of the bodies of the vertebræ, and that the deformity follows only as a natural consequence.

A few years ago Dr. Charles B. Radcliff, physician to the Westminister Hospital at London, stated that in the great majority of cases, caries of the spine is an unmistakably strumous affection, being neither more nor less than tuberculous infiltration of the bodies of the vertebræ, and that changes in the bone are due to the melting down of this deposit, rather than to any strictly inflammatory process. This is in substance about what most writers up to the present time have taught. Some of the text-books, however, while treating of it as a disease of strumous origin, lay some stress on injury as an exciting cause, yet Wyeth in his most excellent text-book on "Surgery," published only two years ago, says: "It is believed that as between the predisposing and exciting causes of Pott's disease, the former deserve by far the greater consideration.

Within the last five years Virchow, Billroth and others have taken the ground that this disease is caused in most instances, if not all, by fracture of the bodies of one or more of the vertebræ. They are led to this conclusion by the fact that in many autopsies the brain, lungs, and all the rest of the spinal column not immediately at the point of curvature were in a perfectly healthy condition.

The deformity also occurs in families unusually free from tuberculous diseases, and when the supposed tuberculous matter has been submitted to the microscope, it has been found to consist only of pus, with some detritus of bone, cartilage and periosteum. The history of most cases also, if not obscure, can be traced to an injury from a fall or otherwise, and finally, in autopsies where the disease was not far advanced a sequestrum with well marked fracture has been found. That fracture of the bodies of the vertebræ do occur, followed by displacement of the fragments, compression of the cord and death, we all know. At the January meeting of the Jasper County Medical Society, Dr. Brooks, of Carthage, exhibited a beautiful specimen of fracture of the bodies of the seventh cervical and first dorsal vertibræ, the subject having been a man somewhat advanced in years. But if the fragments had not been displaced, and the cord in no way injured, what was there to produce immediate death? In other words, if some of these worst fractures produce immediate death, what becomes of the milder cases, of children, especially, who do not usually receive severe injuries, and the fragments of whose bones when broken are not so liable to be displaced? Only a short time ago I had under my care a case of this deformity in which the origin of the disease was distinctly traced to a fall from a dining table. In this case, father, mother and several brothers and sisters were remarkably healthy, and so far as they knew, no form of tuberculous disease had ever existed among their ancestors.

Assuming that the fracture of a vertebra is the cause

of this deformity, the pathology may be thus explained. When we remember that the bodies of the vertebræ are firmly held in place by the intervertebral fibro-cartilages, and by the anterior and posterior common ligaments, and also that the body of each vertebra originally consists of three pieces, derived from three separate points of ossification, and that these pieces are not firmly united before the sixteenth year, we can easily conceive how with a ligamentous attachment so firm, to a bony substance so frail, a fall from a table, chair or bed, or even a fall against a wall, bending the upper portion of the spine backwards, might fracture the body of a vertebra, or at least separate one of the original pieces from the rest. There being, however, no considerable displacement of the fragments on account of the firmness of the ligaments, the child continuing to move about, keeping up sufficient motion between the fragments to prevent bony union, and to produce irritation, inflammation and finally suppuration, resulting in caries and absorption of the bodies of the vertebræ, till the weakened structure yields under the superincumbent weight and falls forward, as has been described under tuberculosis as the supposed cause.

If this destruction of bony tissue should be confined to one vertebra only, the resulting deformity would be angular, but as often happens, either from more than one being primarily affected, for rom the extending of the pus cavity to the vertebra above and below the original trouble, there may be a gradual giving way of several of the bodies, and in this case the deformity would not be so angular, but would be more marked. In some autopsies it is impossible to tell at what point the caries began, several vertebræ being affected, the bodies being nearly or quite obliterated, and the arches pressed backward and curved till the upper portion occupies nearly or quite a horizontal position. Strange as it may seem, though the spinal cord is constantly exposed to the action of the pus, it is rarely affected, and so far from being compressed by the crushing down of the bodies of the vertebræ, the arching backward of the laminæ, and the meeting in front of the still unaffected bodies, allow it even more than its accustomed room.

The pus in these cases, as in all others, has a tendency to seek an outlet, which following the line of least resistance and appearing at points of the body some distance perhaps from the seat of the disease, is the most common reason adduced by the advocates of the strumous theory for its tuberculous origin. These abscesses do not, however, always find an external outlet, but are walled in in such a way that the more fluid portion is absorbed, and the residue, when mixed with detritus of bony matter, etc., gives the cheesy or tuberculous appearance as before stated.

If the injury occurs in the cervical vertebræ the pus would likely follow the course of the longus colli muscle, making its way behind the trachea and œsophagus, and probably at last open into the thorax. It sometimes follows the scaleni or the sterno-mastoid and points at the upper border of the sternum or above the first rib. From the dorsal region, it is most likely to find its way into the posterior mediastinum, passing through the diaphragm and the aorta, coursing along one or both iliac arteries below Poupart's ligament, and making its appearance in the femoral region, Probably, however, the most common as well as the best known of these spinal abscesses, is that of the *psoas abscess*. Remembering that the psoas muscle rises from the sides of the bodies of the last dorsal and all the lumbar vertebræ, also from the edges of the intervertebral cartilages, and the bases of the corresponding transverse processes; that from this extensive origin the fibres converge, pass downward across the pelvis, and forward beneath Pouport's ligament, to be inserted into the trochanter minor; that throughout its entire course it is enveloped in a strong fascia, a portion of the iliac fascia, we can easily comprehend how, if the vertebræ corresponding to the origin of this muscle be affected, the pus would follow within the sheath and point in the region of the trochanter minor. It is not to be understood, however, that the pus always follows these regular channels. It may break through the sheaths of the muscles at any point, and wander through devious paths, and make its appearance at unexpected places.

Kyphosis is from its nature a slow process, unless at the time of the injury there should have been considerable displacement. It usually occurs in children of very tender age, from two to eight years. The child has recived a fall or a blow across the back, but makes no special complaint till the circumstance is forgotten. It then complains in a general way of soreness in the back, more apparent when lifted by the arms or pushed to one side. It flinches or complains when washed with very warm water, when the sponge passes a certain point on the spinal column. The child is pale, anemic and little inclined to join in the common plays of other children, preferring to observe them from a safe distance, fearing a jostle. He walks very softly so as to make as little movement as possible of the spine. He picks up a toy by flexing his knees and hips, keeping the spine nearly erect. As he rises, he places his hand on a chair or on his knee for support. After walking, he will stop and rest upon his hands, supporting his elbows on the table or his mother's lap. At length an undue prominence of one or more of the spinous processes is observed, and then the deformity with all its attendant ills, including emaciation, abscesses, etc., makes its appearance.

The prognosis in the first stages under proper treatment is hopeful; in the advanced stages, after the destruction of the bodies of one or more of the vertebræ, the most that can be hoped for is bony union *with* deformity. The reason for this is obvious, for if by any means the spinal column should be brought to its natural outlines, there would intervene between the segments of healthy tissue above and below, a space equal to that which had been destroyed, and which would be

too great ever to be replaced or bridged over by new growth. The cure of the deformity then being out of the question, it is of the utmost importance that we should make an early diagnosis. To this end, whenever we find a child complaining in a way to lead to the suspicion that there might be spinal irritation, we should immediately ascertain if there is any localized tenderness. This may be usually ascertained by palpation, percussion, or by moving a hot sponge along the spine. It is also well to use rotation, flexion in different directions, and a slight longitudinal concussion by using the hips as a lever and pressing them suddenly upwards, while the shoulders are fixed. The exact point of tenderness is also sometimes well shown by passing the two electrodes of a Faradic battery slowly along the spine, one on each side of the spinous processes. If localized tenderness be found, that alone should put us on our guard against a malady which, when fully developed, we have no adequate means to combat.

In regard to treatment, there is scarcely any disease in which the means have been more varied or less satisfactory. Its treatment as tuberculosis has been without the least avail, and mechanical appliances to remedy the deformity while the disease is yet in its active stage, or even to sustain the superincumbent weight, have as a rule proved worse than useless.

Since, however, recent investigations have demonstrated the pathological conditions existing in the great majority of cases, the treatment has been more rational and accordingly more successful. If a surgeon should be called, in a case of fractured femur, and instead of immobilizing the parts, should put the patient upon cod liver oil and iodide of potassium, and order out-door exercise every day, no one would expect a favorable result, yet this is about the treatment usually given to these cases of fractured spine.

The first and most important principle of treatment in these cases, is just the same that it is in all other cases of fracture; perfect immobility of the parts till firm union has taken place, and this in the most favorable cases will require many months, those more severe perhaps requiring years. This immobility can be obtained *only* with the patient in the horizontal position, and here is the chief difficulty we have to contend with. We visit a patient and find that he has symptoms of vertebral fracture, with slight deformity, indicated by undue prominence of one or more of the spinous processes. The child is still able to move about, yet his motions are peculiarly guarded and careful, that he may avoid all jarring of the spinal column. His parents are anxious that he shall take even more exercise than he is inclined to do, and it may be hard to convince them that it is necessary for the little patient to assume at once and for so long a period, a position that does not seem warranted by the immediate exigencies of the case. When, however, they fully understand that the health and even the life of the patient, as well as the prevention of deformity, depend on this course, all opposition is likely to yield. Even the patient himself soon becomes reconciled to the confinement, as in this way he finds immunity from pain which can be secured in no other way. The confinement instead of depressing the vital powers, usually has just the contrary effect, so that the health in every way improves, good nutritious diet being usually demanded, with medication only to meet such occasional conditions as may from time to time demand attention.

If there is as yet little or no deformity, a hard hair- or moss-mattress is all that is necessary in the way of a bed; but where the deformity is considerable it may be necessary to procure a water-bed, which has many advantages over an ordinary mattress.

Active symptoms, as indicated by pain and hyperemia, should be met by antiphlogistic treatment. Among these, local depletion and the use of the ice-bag of oiled silk are probably the best. During this period the patient should assume the prone position, not only for the more convenient application of remedies and the relief of hypostatic congestion, but for the greater comfort of the patient. An examination should be made from time to time in order to ascertain as nearly as possible the progress or regress of the case, just as in other fractures, but it is not likely that the deficient portions of the spinal column will be bridged over, either by callous or osteophytes in a period of time much less than twelve to eighteen months. When this result has apparently been accomplished, the patient may be allowed to carefully test his ability to assume the erect position, but he must again immediately resume the horizontal position on the least return of unfavorable symptoms.

The limits of this paper will not permit me to enter in detail into a description of the methods that have been resorted to to secure immobility of the parts, or even of those that have on trial proved most successful. As in ordinary fractures, some well-fitting splint is necessary to secure immobility of the fragments, so in these cases as soon as the active symptoms are past we should supplement the benefits of the horizontal position by those of some well-fitting support.

In many cases all that is required is to secure the child to the mattress by appropriate bands or straps around the hips, shoulders and head. If the mattress or a strip of stout sheeting is tightly stretched on a stout iron frame, it readily permits the patient to be moved from place to place.

Dr. Sayre's plaster-of-Paris jacket has the merit of being cheap and easily applied. It was originally supposed that if the patient were suspended and the jacket applied, it would keep the injured parts of the spine from coming together by acting as a longitudinal support. In practice, however, this idea has proved utterly fallacious, without, however, detracting from the value of the jacket when used in connection with the horizontal position.

Dr. Bauer, of St. Louis, has invented a very neat cuirass, consisting of a frame of soft iron fitted properly to the patient, lined with galvanized wire gauze, and properly padded. Handles are affixed by which the pa-

tient may be carried from place to place or given outdoor recreation. A support of this kind is especially useful after union has taken place to guard the patient against accident, and to restrain too free voluntary motion.

An objection to this cuirass is its cost, and the fact that it can only be made by a skilled mechanic, using a plaster cast of the patient as a model. Distraction or longitudinal extension by means of cords and pulleys was formerly much used by French surgeons for the purpose of relieving the deformity. Though unsuccessful for that purpose, it seems that it might be used to a slight extent to assist in diminishing pressure, just as we use extension in ordinary fractures.

Paralysis occurring during the progress of the disease is always an alarming symptom, yet it is often relieved by the horizontal position without a very special treatment.

Abscesses occurring during the progress of the disease are generally of the kind known as cold abscesses, show but little tendency to point, and generally should not be interfered with; but if they should be superficial or have a tendency to penetrate the deeper tissues, or to encroach upon important organs, it might be better to lay them open. Aspiration affords present relief, but they will rapidly refill so long as suppuration is going on at the original site of the injury. The treatment of the psoas abscess does not come within the scope of this paper. It usually indicates a fatal termination of the disease, the patient yielding to hectic, anemia and septicemia.

Nourishing diet and proper hygienic measures are of the utmost importance in all stages of the disease, while quinine, iron, sedatives, etc., must be resorted to when required, on general principles.

INFLUENCE OF HYPNOTISM ON THE HUMAN ORGANISM.

BY BENNO VON STEINMETZ, M. D., ST. LOUIS, MO.

Hypnotism and its application to the treatment of disease is rapidly gaining followers, notwithstanding the reports of injury to the nervous system, caused by its repeated application. If hypnotism is injurious in itself, and if the harm caused by it outweighs the possible benefit derived from its employment, then we must not only exclude this remedy from our own practice, but also advise against the use of it by anyone.

The first point to be examined into, is, whether the reported pernicious influence of hypnotism has not been caused by careless, injudicious, or even too energetic application of the remedy?

Shall the physician abstain from the employment of narcotics, because fatal accidents have happened from their use by indiscrete and careless persons? Every new and little-known remedy requires minute and conscientious investigation into its physiological and therapeutical effects upon the different organs of the human system, before it can be employed in disease; why should not this remedy which, without doubt, may be employed as such, be carefully watched and examined, before it is used indiscriminately, by anyone who thinks himself capable of applying it? But what is the actual status of this wonderful agent?

Everybody, even laymen, without the least knowledge of physiology or pathology of the nervous system, feel themselves called upon to hypnotize and treat disease with hypnotism, without even knowing the pathological changes, which they undertake to cure. It is therefore apparent why this treatment does not show better success, and it is even surprising that one does not meet with more unfortunste results.

Dr. J. J. Sawolshskaja, in St. Petersburger *Med. Wochen.*, reports the result of his experience with the therapeutic application of hypnotism during the last two years. He has paid careful attention to the condition under which the hypnotic sleep may be harmful. Presuming that the treatment with hypnotism and suggestion is essentially psyphic, he endeavored to place the patients under conditions in which their psychical equilibrium would not be disturbed. During the act of hypnotizing, the patient was required to keep perfectly calm and quiet; the acceleration of the pulse beat, during the process, served as a counter-indication to its application. The patients were always treated in bed, under the condition most favorable to sleep; never in the sitting posture, in which even healthy persons, sleeping this way, are fatigued. In accordance with Bernheim's method, he produced sleep through suggestion, because he found it to be the least exciting, whereas, by the method of fixing the attention on a bright object, he found that great excitement was produced in patients of nervous temperament and he discontinued it. The following is the manner in which he proceeds: He orders the patient to close his eyes and concentrate his thoughts on sleep; he then places his hand upon the forehead of the patient and protects his eyes from the influence of light. The majority of patients feel sleepy after a few minutes, and in from five to fifteen minutes they are usually sound asleep. Patients, hypnotized in this manner, sleep peacefully, the face being slightly paler than usual; the pulse beats more slowly, the skin is less sensitive, the tendon reflexes more marked. Excessive neuro-muscular excitability (Charcot) is sometimes noticed. Questions are answered slowly, almost in an audible voice. The Doctor has seldom made suggestions in the first or second seance, because he desired to convince himself always, as to whether any hurtful consequences would follow the hypnotic sleep itself, as this is important for the success of the treatment.

The treatment itself during the hypnotic sleep is limited to therapeutic suggestions only. If the patient is suffering from a tedious chronic disease, it is not advisable to suggest complete cure at once, as in this case the patient may be excited to such an extent that

it is necessary to awaken him, or to change the form of the suggestion. Suggestions made in a certain way are well received, because the patient goes to sleep with the conviction that he will find himself relieved on awakening, and in fact, he seldom wakes up without being greatly improved.

Dr. Sawolshskaja lays great stress upon the restriction to therapeutic snggestions only, because any deviation from this rule is harmful, as well during the hypnotic sleep as after awakening, and it is liable to injure the nervous system.

The observations of Bernheim and Charcot, as well as the writer's, coincide as to the greater irritability of the mind in hypnotized persons, which shows itself plainly in the fact that the physician can at will produce either gayety or sadness, weeping or laughter; no wonder then, that the attempt to experiment with such hypnotized persons should injure the nervous system. To show the pernicious results of such experiments, he cites the following cases from his own practice:

A hystero-epileptic patient, who was treated by means of suggestions while hypnotized, improved rapidly under this treatment; the attacks became less violent and the interval between them was lengthened; each time, on emerging from the hypnotic state, she felt refreshed and strengthened. One time, after being hypnotized in the usual manner, the doctor opened her eyes, made her get up from the bed and suggested to her that birds were flying around the room, and induced other innocent hallucinations. On awakening from the trance, she had a violent hystero-epileptic attack. In another patient, the attempt to suggest hallucinations of sight and hearing was followed also by convulsions. In a third, it was followed by headache and painful sensations in the head and body. These are the views of the doctor concerning the probable cause of the injurious influence of hypnotism upon the nervous system. In conclusion, he says that in the course of one year in which he has observed the above mentioned precautions in hypnotizing patients, he has noticed no untoward complications and no interruptions in the harmony of the physical and psychical state of the subject, and the hypnotic sleep *per se* quiets and tranquillizes the patient. He is thoroughly convinced, that in the treatment by suggestion, the operator must confine himself to therapeutic suggestions only, otherwise the evil may be increased instead of relieved.

American Public Health Association.—The preliminary announcement is out, of the American Public Health Association, which holds its 17th annual meeting at Brooklyn, N. Y., October 22, 23, 24, 25, 1889. Among the desiderata we notice that "all papers must be either printed, type-written, or in plain handwriting.—*Times and Reg.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,
EDITOR.

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SATURDAY, JULY 13, 1889.

A New Diuretic in Affections of the Heart.

In addition to the already large list of virtues attributed to milk, the illustrious Germain See (*Bull. de l'Acad. de Medicine*) now says that "Of all diuretics, the most infallible is milk." That property, and the equally serviceable one of being an aliment, render it capable of holding the important position it occupies in the therapy of affections of the stomach and the heart.

In gastric affections, it is entirely efficient when there is increased secretion of hydrochloric acid, but it fails most ignominiously in opposite conditions; such, for instance, as is brought about by cancer. Given in doses of from six to eight pints a day, it is of material assistance in dropsically disposed cardiopathies, especially when the stomach possesses a normal or increased power of secreting hydrochloric acid. It is beneficial, in the first place, because it constitutes a complete aliment, in that it contains the three elements, caseine, sugar and fat, which are indispensable to the maintenance of vital forces and the reparation of corporeal losses.

In the second place, it is serviceable because, in general, it is digested easily. When, in certain cardiac cases, or even healthy persons, it is not easily digested, it is probably because of the deficiency or absence of the lactic ferment of the stomach. The milk then coagulates in large indigestible masses.

The advantage which surpasses all others in cardiac affections is its diuretic power. But with this effect, unfortunately, there is often a simultaneous production of glycosuria. The diuretic property of milk is due to lactose (sugar of milk) as M. See has discovered by experimentation successively with the various elements of milk. Lactose is the most powerful and the surest of all diuretics now known. Moreover, when lactose is used, one obtains the diuretic effect without at the same time causing a diabetic polyuria. In doses of three ounces, diluted with four pints of water and with the discontinuance of all other drinks, marked diuresis is obtained in all patients, whatever be the heart-lesion present, even with the degeneration of the myocardium, alteration of the aortic valves, etc. This action is less constant in arterio sclerosis, however. As soon as the lactose treatment is suspended, the quantity of urine falls to its previons standard.

Although the diuretic effect is so certain in dropsies of cardiac origin, it is unreliable, and even sometimes nil, in dropsies from renal disease. In this way, one can estimate the degree of alteration of the kidneys present.

The diuretic effect is varied or impeded sometimes by causes other than renal lesions; lactose produces, at times, diarrhoea, or profuse sweats, which diminish the polyuria, but do not retard the reparative process. The medicament should be prescribed for eight or ten days, and then interrupted for some hours to be again renewed. If, perchance, it is not well borne, it may be flavored with aromatics. It is necessary to discontinue all other drinks.

In respect to the mode of action of this new diuretic, which may be called phsiological, it is well known that most diuretics act through the high blood pressure which they cause; after the administration of lactose, on the contrary, the pulse and tension remain as usual. The alkaline salts are supposed to produce the diuresis by virtue of their osmotic power. There seems to be an elective and selective effect of the lactose on the secretory elements of the kidney; therein lies the physiological character of its action.

We have, then in lactose, the true curative means for dropsies of cardiac origin, even when they have resisted all other diuretic agents. But in this condition of heart insufficiency there is another complication, even more grave, sometimes, that is, dyspnea, against which lactose is powerless. If then, the iodide of potassium, or preferably, of sodium (as the potassium salts increase the toxicity of the urine), be given in conjunction with lactose, we have a combination which fulfills all indications.

The Effect of the Seminal Fluid on the Organism.

Little supposing that he would awaken the amount of discussion that has been developed by it, Prof. Brown-Sequard presented a communication to the Societe de Biologie, at the meeting of June 1, detailing the remarkable results which he had obtained in some experimental subcutaneous injections of seminal fluid.

As early as 1869, at his course at l'Ecole de Medecine, the author had studied the effect of the nervous system on the glands, and reciprocally, the effect of the glands on the nervous system, independently of their secretions and with sole reference to the modifications which the blood undergoes in traversing them. He had concluded, in a theoretical way, that the influence of the testicle was enormous. In 1875 he practised grafting of parts of the testicle of one animal onto another animal, but failed, save in one case. An aged and feeble dog, into the thigh of which he had engrafted a piece of testicle, was rejuvenated to a remarkable degree. Later, the author had attempted, on himself, an experiment, carried out in the following fashion: He treated himself by hypodermic injections of a mixture of the blood from the spermatic veins, combined with the juice squeezed from a portion of triturated testicle of a young animal, to which was added a little water. Six treatments were undergone; they were painful, accompanied at times with a transient redness of the skin. Following the treatment, muscular power was augmented; intestinal atony, that inveterate torment of old age, gave way to normal defecation. The bladder regained its contractility and the stream of urine recovered its youthful vigor. At the same time, cerebral work was accomplished with ease, and the whole system partook of this rejuvenation.

In accounting for the effect noticed, the author thought that it was due more especially to the venous blood returning from the gland, as in animals, the injection of semen or filtered spermatic fluid resulted in nothing but abscesses.

His auditors did not take as kindly to these startling declarations and deductions as M. Brown-Sequard would have liked; M. Fere claimed to have observed indications of renewed activity amongst the demented—idiots, even—as a consequence of acute febrile affections, such as pneumonia; from which he was inclined to the opinion that the local lymphangitis, to which the author had referred, had incited the superactivity spoken of. To this M. Brown-Sequard responded, that it was in just those cases which had presented the least local reaction, that the dynamic effects had been most marked. Besides, it was a matter of common observation that the nodular inflammations resulting from morphine or other alkaloidal injections gave rise to no such increase of muscular power, upon which he had insisted.

M. Dumontpallier was of the opinion that the role played by the imagination was not inconsiderable.

At the next following meeting of the society, M. Brown-Sequard referred again to the subject. After affirming the statements he made before, he added that he wished to call attention to the persistence of the beneficial effects produced on himself, which remained even after eleven or twelve days. He thought that the effects were dynamic and not organic, because one could hardly attribute any organic change to the sphincter-centers of the spinal cord, and he proposed to elucidate that part of the question in a future communication to the Society. He felt certain that castrated women were veritable female eunuchs, and were losers intellectually and physically; one might, then, essay injections of ovarian fluid in such cases.

In case any doctresses of advanced years desired to test, on themselves, the effect of this ovarian fluid, the author would be happy to assist them.

Why Hydrochloric Acid Is Diminished In Gastric Carcinoma.

Dr. A. V. Phelps (*Medical Record*) in subscribing to the common belief in the absence of hydrochloric acid in a cancerous stomach, suggests that the reason for this

is not a general lowering of the vitality, as it is usually explained, but that the hydrochloric acid combines with the ptomaines produced by the organisms which cause the cancer, granting, in the first place, that cancer is the production of micro-organisms. He arrives at this conclusion by analogy:

It has finally been decided that the beneficial effects of iodoform are due, not to any influence it may exert on the pyogenic germs in a wound, but that it combines with, and renders inert, their ptomaines ; the tissues being relieved of the ill effects of these, are capable of combating successfully with the germs.

The analogy comes in in this way : Riegel has found that even normal gastric juice, taken from a healthy stomach, when mixed with juice from a carcinoma, has its digestive powers weakened, not converting albumen, as does other portions not mixed. Strumpel says that "this makes it seem probable that the normally constituted hydrochloric acid is in some way altered by the carcinoma." In other words, according to Dr. Phelps, the hydrochloric acid is diminished (and therefore weakened) because it combines with the ptomaines from the cancer.

Curetting The Uterus in Puerperal Fever.

"As I have found the curetting of the uterus so valuable a treatment in chronic endometritis, it has struck me that it might be used with advantage in cases of puerperal fever accompanied by offensive discharge. The temperature has been so often found to fall after the washing of the uterine cavity with some antiseptic solution, that I fancy the more heroic method of curetting the entire diseased surface, either alone or in conjunction with lavement of the organ, ought to yield good results. Not having seen any mention of this in the principal text-books on midwifery, I venture to suggest it as a treatment, and shall certainly give it a trial in the next case of the kind I meet with.

Dublin. Alexander Duke, F.K.Q.C.P.I."

—*British Med. Jour.*

This startling innovation—as the writer evidently believes it to be —has been in vogue, and to good purpose, for some time in this retired and secluded portion of the globe. If the writer of the communication will go over the files of last year's *Review*, he will find reports of the benefit accruing from curretting the uterus in puerperal fever, employed by our friend, Dr. Dalton, of the City Hospital.

Results of The Suspension Treatment Obtained By Eulenberg and Mendel.

Drs. Eulenberg and Mendel recently published, in the *Neurologisches Centralblatt*, a report of cases of tabes and other nervous affections treated by the suspension method during the last four months. They treated 31 men and 9 women ; there were in all 975 suspensions, representing about 25 for each patient. The minimum number was 2; the maximum 60. Supensions were made three times a week, from one to three minutes at a time, according to the capability of the patient to stand them. The 40 cases represented 34 of tabes ; localized sclerosis, 1 (woman); chronic myelitis, 1 (man); traumatic neurosis, 1 (man); paralysis agitans, 3 (women). The results in the non tabetic cases were not encouraging. The tabetics were old cases treated long since at the Polyclinic by diverse methods,which permits, therefore, a comparison of the efficiency of these with the suspension method.

Of the 34 cases, 5 refused to continue the treatment after a few seances ; 6 not appearing to be benefitted were remanded to treatment by electricity ; 2 ceased coming to the clinic after attaining some amelioration. Therefore there were but 21 patients who continued regularly under observation. Of these, 5 were very much benefitted ; 11 partially so, and 5 were made neither better nor worse by it. In every case amelioration was observed only in the symptoms, not with reference to the disease itself.

Sleep and the general condition were improved in 16 cases ; the sign of Romberg, and vesical troubles, each in 14 cases ; and yet in a case of incontinence, there was an aggravation. Fulminating pains were lessened in 16 cases ; locomotion improved in 9 ; paresthesia in 5 ; anesthesia in 3 ; impotence in 3 (out of 29 ataxic men). Only once were gastric disturbances quieted ; cephalalgia was frequently soothed ; an one case of amblyopia was improved, although it was due to atrophy of the optic nerves.

In the opinion of the authors, suspension constitutes a mode of treatment for ataxia which may be placed in the same rank as others (hydrotherapy, electricity, etc.), perhaps even above them. How does suspension bring about the effects noticed? They are inclined to agree with Motchoutkowsky, that it determines an elongation of the spinal marrow; and perhaps also, a distention of the vessels and an increase in the arterial tension. Very likely, on the other hand, the moral influence should not be lost sight of.

The Influence of the Electric Light on the Eyes.

Dr. Lubinsky presented a communication on this subject to the Congress of Russian Physicians at St. Petersburg. He had observed, since 1879, thirty cases, instances of an affection of the eyes in young marines, whose occupation forced them to remain near electric lights. The symptoms of this disease, which he termed photo-electric ophthalmia, are very characteristic; they begin during sleep, the patient awaking with an abundant flow of tears, accompanied with intense peri-orbital pains. Photophobia is pronounced. Careful examination discloses palpebral edema and peri-corneal injection. In examining with the ophthalmoscope, one rec-

ognizes a hyperemia of the papilla, and sometimes venous pulsation in the vessels of the retina. Within from one to three hours these tumultuous phenomena calm down, the patient is again able to sleep, and in the morning awakes with only a feeling of fatigue about the eyes, such as experienced after much night reading. Sleep is indispensable for the induction of photo-electric ophthalmia.

Dr. Lubinsky attributes the symptoms to hyperemia of the optic nerve and to the lesions of the cornea.

Dr. McKlakow (of Moskow), showed on his own hands, an erythema which had been provoked by the action of a voltaic arc, which proved the colorific effect of the electric light. He counselled the veiling of the globe of such a light with a yellow cloth, for the purpose of preserving the eyes of persons forced to work around it.

Antipirin in Erythema Multiforme.

We have recently treated a severe case of erythema multiforme with antipyrine, obtaining a most prompt and decidedly beneficial effect. Impending relapses were repeatedly cut short by its administration, and by continuing it in gradually decreasing doses, the patient recovered entirely.

MEDICAL ITEMS.

Death of Dr. Ultzmann.—The death is reported of Dr. R. Ultzmann, Extraordinary Professor of Diseases of the Urinary Organs in the University of Vienna.

The Cat as a Disease Carrier.—A London health inspector reported that a number of cases of diphtheria had been caused by cats going from house to house, and thus carrying the virus.

An Authenticated Case.—Surgeon Parry, of the East Indian Medical Department, says that he saw the jet-black hair of a rebel Sepoy turn grey in an hour, while he was under examination and half mad with the fear.—*Times.*

What Shall We Call It?—A Western paper, speaking of a man who carries a bullet in one side of his head to the great detriment of his memory, says that he frequently harnesses one side of a horse and forgets other.—*Times and Reg.*

Progress in Medical Education.—The Iowa State Board of Health has decided that Iowa Medical Colleges after 1891 must give a four years course if they desire their graduates to practice within the borders of the Commonwealth.

Salicylate of Sodium in Pruritus.—Dr. Icard reports, in *La Gazette Medicale*, a case of obstinate pruritus, which had resisted a number of remedies, but was quickly relieved by the internal use of sodium salicylate in doses of forty-five grains a day.

Another Martyr.—Dr. Gautier, of France, while pulverizing dry discharges for the purpose of making experiments as to infection by tuberculous germs, became himself infected and died. Thus one by one physicians are added to the list of martyrs whose zeal in investigation leads them to their graves.

The Tennessee Medical-Practice Act.—The new medical-practice act of Tennessee is thus summarized in the Atlanta *Med. and Surg. Jour.*, for June. There is a board of examiners, six in number, not more than four of whom are to be of the same school of practice. They are appointed by the Governor. No one may practice medicine without a certificate from this board, under penalty of $100 for the first offense, and of $200 afterward. All persons in practice at the time of the passage of the act are entitled to such certificate. Those thereafter desiring to begin practice must present a valid diploma or pass an examination. The examination fee is $10, and the certificate fee is $1. Itinerants are to pay $100 a month. The act does not apply to midwives. It has gone into effect, the "sixty days" limit having expired.

The Case of Attempted Blackmail.—At the Central Criminal Court on Wednesday last Amelie Demay and Charles Grandet were found guilty of conspiring to get up a fradulent action for breach of promise of marriage against Mr. Malcolm Morris, and also of attempting to induce several persons to commit perjury in order to support the action referred to, and were sentenced, the male prisoner to five years' penal servitude, and the females to eighteen months hard labor. Mr. Morris has had our sincere sympathy in the painful position in which he has been placed, and we are glad now to be able to congratulate him on the service he has rendered to the profession and the public by his firm and courageous conduct on a very trying occasion. A weaker man might have had these pests of society hanging around him and blackmailing him for the rest of his life.—*Lancet*, June 29.

TRANSLATIONS FROM THE GERMAN.

By Dr. Benno Von Steinmetz, St. Louis.

Fees.

A doctor in Bootle (England) has the following printed on his prescription blanks: Gratefulness of the patient is part of his disease; is most prominent when the fever is highest, lessens during convalescence and

disappears as health is re-established. Hence prescriptions are given only for cash.

Cremation vs. Interment.

Dr. W. W. Lipski reports that an epidemic of diphtheria in the city of Alatyrj, where no case of diptheria had occurred for eight years, was started by the exhuming of the body of a person who had died of diphtheria eight years previously. The first victims of the disease were the relatives of the dead, and the children of the sexton who exhumed the body.—*St. Petersburger Med. Woch.*

Lanolin Sublimate-Ointment.

Corrosive sublimate is insoluble in oils and fats, consequently there is no chemical, but only a physical, combination, where the aqueous sublimate solution is subdivided by the minute fat-globules. Gottstein has proven that sublimate mixed with lanolin retains its antiseptic and germicidal properties. He simply adds the aqueous solution of sublimate to anyhydrous lanolin.—*Therap. Monatsh.*, 3.

Treatment of Pneumonia by Chloroform Inhalations.

Dr. Theodore Clemens reports that in 42 years of practice he has treated all cases of pneumonia, severe or mild, with chloroform inhalations and has not had a single fatal case. To the chloroform he adds alcohol, saturates some cotton twisted into a ball, covers it with some loose dry cotton and holds this to within an inch of the patient's mouth and nose. He thinks that the chloroform-spirits is taken up by the blood, completely changing it in the lungs, and by defibrination, prevents its hepatization in the alveolæ.—*Allg. Med. Central-Zeitung*, 1889, 21-23.

An Antiseptic Mouth-Wash.

Dr. Dujardin-Beaumetz recommends the employment of the following mouth-wash:

℞	Acid. carbolic., - - -	gr. xv.
	Acid. boracic., - - -	ʒvj.
	Thymol, - - - -	gr. viij.
	Essence of peppermint, -	gtt. xx.
	Tr. anis., - - - -	ʒijss.
	Aquæ dest., - - - -	Oij.

M. sig.: rinse the mouth and rub the teeth with half of this solution and half water, once or twice a day, after meals.

Aids to the Diagnosis of Abdominal Tumors.

Distention of the stomach with air, and of the colon with water, has been used for diagnostic purposes, with success, in the Naunyn Clinic (Koenigsberg-Strassbourg) for the past two years. The result shows that, as a rule, all tumors are pushed towards the side on which the organ from which it grows, normally lies. Especially valuable are the results of this system of examination for the diagnosis of liver, spleen and kidney tumors; but it is of less value in examining new growths connected with the stomach, guts or other organs of the abdomen. Depressions and protuberances in the lumbar region are, by this method, shown very plainly.—*St. Petersburger Med. Woch.*, March 11, 1889.

Catgut or Silk?

Dr. E. Braatz declares that the want of success with catgut ligatures is due to insufficient sterilization. He shows that it is necessary to free the gut completely from all fatty matter, before placing the same in the sublimate solution, because aqueous solutions will not act on the gut if oil or fat be present. His directions are as follows: Roll the catgut upon a glass cylinder and place it for twelve hours in chloroform or ether, then shake well and immerse in 95% alcohol, leave it there for 12 hours; transfer it while still moist to a 1 to 1000 sublimate solution, in which it may be allowed to remain 24 hours. From the bichloride solution it may be placed in 95% alcohol to keep, or it may be dried and rolled in sterilized linen compresses, and kept in a suitable glass bottle.

Silk likewise contains more or less oil or fat, from the hands of the workmen, and it must therefore be treated like the catgut. The modus operandi may be modified, and possibly another antiseptic than sublimate substituted, according to the taste of the operator, but the main point is to free the silk or catgut from all fat and oil before sterlizing it.—*St. Petersburger Med. Woch.*, March 11, 1889.

A New Method of Treating Diphtheria.

In 1054 cases of epidemic and scarlatinal diphtheria treated by Dr. Henning during the last ten years, the average mortality was 2.7%. He orders a gargle of clear lime water every ¼ hour, and after every gargle, 10 to 20 c. c. of lime-water internally. He makes use of the esophagus of a steer for holding ice, and applies this around the neck of the patient. The advantage of this receptacle is that it is a good conductor of cold, but a bad one for moisture. Along with this he gives potassium chlorate, antipyrine and antifebrine. For nutrition he advises milk, eggs, beef tea and easily digestible meats. If the larynx is attacked, he sprays the parts with lime water; in case paralysis ensues, he injects strychnine and applies a weak Faradic current of short duration several times a day, if possible, in the bath. In 6 to 24 hours the false membrane diminishes and the gargles are then used every half hour or hour. Until this is effected, the gargling must be kept up day and night.

Henning claims that, if this treatment is adhered to

there is no danger, provided the patient be 6 years or over. He had not a single death in patients over this age, although they constituted 60% of the total number.—*Berl. kl. Wochen.*

Treatment of Tuberculosis.

Dr. Cazaux shows that the treatment of phthisis by inhalations of germicides or injections is not encouraging; the patient rarely improves and is never cured; whereas by sending the patient to the mountains, where pure air, pulmonary gymnastics, rest and mineral waters equally contribute, either alone or in common with reconstructives, often recovery, and nearly always improvement, ensue.

The following are Dr. Cazeaux's conclusions:

1. That phthisis pulmonalis is a microbic disease, but that the microbes play only a secondary part in its development; that the tissues must first be broken down before they can accomplish their destructive effect.

2. That in conducting experimental and clinical researches regarding the microbes, we must not neglect the therapeutic reconstructives and hygienic remedies which, up to the present time, have alone given us positive results.

3. That the best hygienic remedy is the air of the mountains at an altitude of 2,100 to 3,000 feet; exceptionally a higher elevation, even, than this, is better.

4. That the principal therapeutic remedy consists in the employment of mineral waters which contain sulphur and soda in abundance.—*Le Bull. Medical.*

SOCIETY PROCEEDINGS.

MISSOURI STATE MEDICAL ASSOCIATION, MAY 21st AND 22nd, 1889.

The President, Dr. A. W. McAlester, in the chair.

[CONCLUDED FROM PAGE 17].

External Urethrotomy, (See page 21).

BY E. VON QUAST, M.D., KANSAS CITY.

Dr. Bransford Lewis.—I wish to confirm Dr. Von Quast's claim of the necessity and great advantage to be derived from the operation of external urethrotomy in such cases as those which he has detailed.

It is not only a desirable thing to do then, but it is the only thing, and the surgeon who palliates and temporizes with milder methods, runs great risk of having his patient die, either from the urethral fever or from septicemia.

One point on which I do not agree with the Doctor, is that of taking two or three days to sterilize the urine, before operating. When the patient is having these chills and fever, it seems to me that the time would be better utilized by cutting in at once, as the opening thus made through the perineum gives a ready and free vent for the urine, allowing none of it to become dammed up or absorbed by the freshly cut surfaces. There is no danger of a urethral chill following it, even if the urine be of the rankest sort; in fact that is one great advantage of the operation. Whereas in internal urethrotomy, although a large caliber is obtained by the operation, there is still some confinement in the passage outwards of the urine, and therefore a certain tendency to absorption of its noxious properties; on the other hand the perineal opening gives immediate escape for the urine and no systemic reaction follows.

The Doctor objects to the plan of allowing a catheter to remain in the bladder and posterior part of the canal after operation, on the ground that it conduces to absorption of the urine, which travels down along between the catheter and the canal-wall, and is therefore liable to give rise to chill and fever. I fail to see a confirmation of his argument from his own experience, as in one of these cases, in which the catheter was not so used, a chill followed. And I believe that that will be the case generally; that there will be a greater liability to chill and fever when the bladder is not continuously drained through a large sized catheter, whose distal end rests in a proper receptacle, containing some antiseptic fluid. Although the objection is frequently made, that the urine will pass out along side the catheter, causing ulceration, etc., I have had no such difficulty to overcome and have noted no such tendency to chill.

In a patient on whom I operated four or five days ago, fever had been running high for a month or more, and its septic character was shown by the irregularity of the chills. The patient was in a really serious condition when I went in, but within 24 hours the fever had vanished and pus, which had formerly been quite profuse, disappeared from the urine. He did well for three days, continuous drainage being kept up by means of the catheter *a demeure*, but at the end of that time it was thought proper to remove it. This was followed by an exascerbation of the fever, which again disappeared on the re-introduction of the catheter. The urine in fact, would not flow well without it.

As regards the difficulty in making the operation, it is a common thing to hear teachers make use of the trite old bug-bear, that, "while an external urethrotomy with a guide is a very simple operation, the same, without a guide, is one of the most difficult operations in surgery." Now this is only partially so; it may be the case where there is a rupture of a previously healthy urethra, but when you are dealing with a urethra that has long been obstructed by a stricture, it is almost invariably the case that the part of the canal behind the stricture is considerably distended by the hydrostatic pressure at each urination, so that by cutting down in the median line behind the point of obstruction, one is very liable to strike the canal, especially if a guide has been introduced down to the point of obstruction, showing us the direction in which the canal lies.

Dr. Von Quast.—In regard to sterilizing the urine, I only did it in the first case, because I had time to pre-

pare the patient. He had urethral chill following divulsion, but not following the incision.

So far as maintaining the catheter in the bladder, I have seen it used and have used it myself and have never seen any good results from it. It becomes an irritant and I think it is not advisible to use it; besides, in lithotomy, I let the parts take care of themselves.

BOOK REVIEWS.

General Orthopedics, Including Orthopedic Surgery. By August Schreiber, Surgeon in-Chief to the Surgical Division of the Augsburg Hospital.—Wood's Medical and Surgical Monographs, Vol. ii, No. 3, June, 1889.

The first evidence of progress or advancement in any department of science or art,is given in the prominence which that department assumes in literature. The inclination to impart to others what one knows, is a dominating trait of human nature. This seems to be especially prominent, however, amongst the members of the medical profession. Attesting the great amount of work that has been done in the study and practice of orthopedic surgery of late years, we have the progressively increasing number of treatises devoted particularly to that branch. Indeed, no department of surgery has surpassed this one in developing practical and material relief for miserable humanity. And for a convincing demonstration of this we have only to refer to the work before us.

Profusely illustrated, as it is, with excellent woodcuts, there being 388 figures in all, graphically depicting deformities, splints, braces and apparatus, and the results of treatment with the same, one is impressed with the care and pains which the author has taken to present the context in as clear and forcible a manner as possible. Lengthy and intricate descriptions are thus dispensed with in a great measure.

A glance at the text readily shows that the work is not to be classed as a mere review or compilation of what others have said, as originality is stamped on every page and bears testimony to the large experience upon which the author has drawn in its production.

The interests of the general practitioner are closely observed, so that it need not be thought that this is a book useful only to the specialist; and it may well be said that the physician who overlooks or neglects to prepare himself in the way of handily supplying bandages or splints will have cause for regretting his omission, for he will frequently be called upon to resort to these measures in his practice, and at times when it will not be possible for him to send his patient to a specialist.

In this issue, which also includes the index to vol. ii. of the series, the high standard of the monographs is fully maintained.

Therapeutische Notizen der Deutschen Medicinal Zeitung, by Dr. Jules Grosser, 1880-1889. Berlin: Eugene Grosser. 1889.

This little book gives in compact form all the remedies which have been recommended since 1880 in the international medical literature, together with the dosage and manner of application in different diseases. It is a very efficient aid to the general practitioner.

BOOKS AND PAMPHLETS RECEIVED.

The Physiology of the Domestic Animals, a Text-Book for Veterinary and Medical Students and Practitioners. By Robert Meade Smith, A.M., M.D., Prof. of Comparative Physiology in the University of Pennsylvania; Fellow of the Col. of Phys. and Academy of the Natural Sciences, Phila.; of the American Physiological Society; of the American Society of Naturalists; Associé Etranger de la Societe Francase d'Hygiene, etc. Pp. 1000; 400 illustrations; Philadelphia and London: F. A. Davis, Publisher. 1889.

General Orthopedics, Including Surgical Operations, by Dr. August Schreiber. Wood's Medical and Surgical Monographs, Vol. 2, No. 3, June, 1889.

Proceedings and Addresses at a Sanitary Convention held at Hastings, Michigan.

A New Principle in the Surgery of the Bladder, Otis K. Newell, M.D., Assistant Demonstrator of Anatomy at Harvard Medical School; Surgeon to the Out-Patients of the Mass. General Hospital. Reprint from the "Boston Medical and Surgical Journal." Diagnosis of Tumors of the Bladder and Stone, with the Cystoscope, Otis K. Newell, M.D., etc. Reprint from "Boston Med. and Surg. Jour."

Is More Conservatism Desirable in the Treatment of Joint Diseases of Children? By A. B. Judson, M.D., Orthopedic Surgeon to the Out-Patient's Department of the New York Hospital. Reprint from "Med. Record," May 18, 1889.

A Resume of Experience at the Aural Clinic of Prof. Hermann Schwartze in Halle, Germany. By Chas. H. May, M.D., Visiting Ophthalmic and Aural Surgeon, Randall's Island Hospitals; Assistant Surgeon New York Ophthalmic and Aural Institute, etc. Reprint from "New York Med. Jour.," May 25, 1889.

Scarlatinous Ostitis. By Chas. H. May, M.D., etc. Reprint from "American Jour. of Obstet.," April, 1889.

Therapeutische Notizen der Deutschen Medizinal Zeitung. Dr. Julius Grosser. Heft ii, 1889. Berlin. Eugene Grosser.

The Radical Cure of Hernia. Thos. W. Kay, M.D., Scranton, Pa. Reprint from "Maryl'd Med. Jour.," March 3, 1889.

Atlas of Venereal and Skin Diseases. Prince A. Morrow, A.M., M.D., Clinical Prof. of Venereal Dis.;

formerly Clinical Lecturer on Dermatology, Unv. of City of New York, Surgeon to Charity Hospital, etc. Wm. Wood & Co., 1889. Tenth, eleventh and twelfth fasciculi.

De la Lobeline dans la Therapeutique de l'Asthme, par le Dr. Silva Nuries. Rio de Janeiro. Leuzing & Filhos. 1889.

Catalogue of the Albany Med. College, 58th session, 1888-1889.

Observations in Clinical Therapeutics. By J. A. Robison, M.D., Prof. of Mat., Med. and Therap., Woman's Med. Col., Chicago; Attending Phys. to Presbyterian Hospital. Reprint from the "Med. Register," 1889.

SELECTIONS.

FORTIETH ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION HELD AT NEWPORT, R. I.

The New York *Medical Record* displays its usual commendable enterprise by presenting a synopsis of the proceedings of the recent meeting of the American Medical Association. From its extensive report we borrow abstracts of some of the especially interesting papers.

[CONCLUDED FROM PAGE 20].

DR. ROBERT T. MORRIS, of New York, read a paper entitled

WHAT DRESSINGS SHALL LIE NEXT THE WOUND?

Vaseline or oil spread upon any textile fabric represents the worse type of dressing, because the unguent mingles with the discharges and retards organization; because the textile fabric entangles new epithelium-cells and connective-tissue cells, and because there is nothing in the dressing to prevent fermentation and wound-infection. Lint and cotton are even worse than texile fabrics.

The cerates spread upon texile fabrics are one point better, in that new epithelium and connective-tissue cells are not entangled in the mesh.

Balsams spread upon textile fabrics or upon lint or cotton, are better than vaseline or cerate, because they may limit fermentation.

There are only two perfect types of dressing. The iodoform covering for small wounds represents one of these. Iodoform forms a thin, firm coagulum with lymph and this is not easily attacked by micro-organisms. Beneath this coagulum the processes of repair go on smoothly in small wounds, even when a certain number of microbes are at work, because the iodoform neutralizes the ptomaines.

The other perfect dressing is the one suitable for larger wounds, and it possesses the following properties: First, smoothness and impenetrability to new epithelium and connective-tissue cells (Lister's protective oiled silk). Second, a bulky mass that is highly absorptive, to draw serum away from the wound, and to make it too dry for microbe food; and this dressing is charged with antiseptics to destroy micro-organisms (bichloride cotton or gauze).

SECTION ON OBSTETRICS AND DISEASES OF WOMEN.

BORACIC ACID IN GYNECIC PRACTICE

was the subject of a paper by Dr. W. W. Potter, of Buffalo, N. Y. The doctor was first brought to the use of boracic acid by the fact that iodoform in him always caused a very troublesome dermatitis. He found boracic acid valuable when the medication was required to remain longer in the vagina than it was possible for tampons to remain on account of the decomposition. He then described minutely his method of applying the remedy, which consisted of an injection, a drying of the vagina, the application of the boracic acid with alternating layers of cotton. He, in some cases, allowed this dressing to remain a week, and thought once a week often enough for these applications. He has had good results with boracic acid after plastic operations. In these cases he leaves a rope of borated cotton hanging from the os over the perineum.

He considered boracic acid a remedy of great value in sterility due to acrid secretion, which destroys the fecundating power of the sperm. It is one of the best powders to render operative wounds in the genital tract aseptic. Boracic acid is suited to many gynecic uses where an antiseptic is required. It can claim superiority over the vaginal tamponnement by reason of odorless, colorless, non-irritant chemical properties; thus admitting of its frequent liberal and prolonged treatment.

The CHAIRMAN, DR. W. H. WATHEN, of Louisville, then delivered his address, entitled,

THE PATHOLOGY OF ECTOPIC PREGNANCY AND PELVIC HEMATOCELE.

The speaker considered of no practical value everything written on the subject of ectopic pregnancy prior to the year 1880, and passed it by. He considered that the ovum was never impregnated in the uterine cavity, and thought that the conjugation of the male and female elements must take place before, or just after, the ovum enters the tube. Ectopic pregnancy is always primarily tubal with the possible exception of ovarian pregnancy. Abdominal pregnancy can not occur except as a result of primary or secondary rupture, and if the villous or placental attachments are destroyed the ovum immediately dies, because it can not form secondary attachment to other structures. If in rupture into the peritoneal cavity the ovum retains villous or placental attachments, it may be possible under certain conditions for the pregnancy to continue, though not probable. If the amnion is ruptured in the early months the embryo ar fetus will die. So-called interstitial pregnancy does not always, though usually, rupture into the peritoneal cavity. If we define pelvic hematocele as an encysted or confined tumor formed of blood, then intra-

peritoneal hematocele is not possible. Then followed an extensive argument upholding these propositions advanced concerning ectopic pregnancy.

The intimate relations existing between pelvic hematocele and ectopic pregnancy was his reason for considering these two subjects together in his address. Nearly every author who has written on this teaches that blood may accumulate in the peritoneal cavity, and become rapidly encysted and fixed by the effusion of a layer of lymph exudations. The author did not adhere to this belief. He thought it impossible. If in suppuration the fluctuation can be discovered, but is felt above the pelvis, laparotomy should be done.

Dr. Montgomery read a paper on

THE INDICATIONS FOR, AND LIMITATIONS OF, THE OPERATION FOR THE REMOVAL OF THE APPENDAGES,

urging the importance of their more accurate determination. The operation was introduced on three lines of indications: 1. To bring about the menopause in what are known as the neuroses. 2. For the relief of symptoms due to pathological changes in the tubes and ovaries. 3. To establish the menopause in grave and threatening disease in the uterus. The aims of the operation as here expressed are legitimate when the indications are correctly interpreted. The indications may be divided into physiological and pathological; the former comprising operations done to establish the menopause, without reference to the pathological conditions present; the latter primarily, for the removal of diseased organs, and may be partial or complete. The operation is justifiable in mania and epilespy, when they can be closely associated in origin, or subsequent occurrence, with the menstrual function. It affords no relief in nymphomania, as the ovaries and tubes do not govern the sexual appetite, nor the power to gratify it. In hysteria it should be a dernier ressort and then performed only after the patient hod been fully informed of the influence it is likely to exert upon her future life. Its value in uterine myomata cannot be questioned, but the exceptional cases in which the flow is not arrested make it advisable, when feasible, to do vaginal hysterectomy.

Suppurative inflammation of ovary or tube is a positive and imperative indication. The frequency of the association of this with peri- and para-metritis makes it good practice to advise exploratory incision, with a view to removal of the offending organs in recurring attacks of either of the latter diseases.

Chronic imflammation of the tubes and ovaries is not necessarily an indication for operation. Polk and Imlach have done good work by demonstrating that many cases can be restored to health by separating adhesions and shortening the broad ligaments.

In conclusion, he urges that: 1. The operation for the removal of the appendages should be promptly performed in every case in which it it is evident that relief cannot be otherwise obtained. 2. It should be considered a dernier ressort where there is a hopeful prospect for restoration to health by less dangerous methods, or without the sacrifice of the reproductive function. 3. Its consideration should be dismissed in every case capable of restoration to health by other plans of treatment.

Dr. William S. Stewart, of Philadelphia, read a paper entitled

WHEN SHOULD THE OBTETRIC FORCEPS BE USED, AND WHAT FORM OF INSTRUMENT IS REQUIRED?

They should never be used to save time, no difference how busy the practitioner was, nor to satisfy nervous women or fidgety nurses. We should use the form of forceps best fitted to the particular case. He presented a pair of his make which he had used in a number of cases with good success. In these either blade can be introduced first, the child is not disfigured, and they do not slip.

Section on Diseases of Children.

Dr. T. B. Greenley, West Point, Ky., read a paper on

THE MANAGEMENT OF INFANTS DURING THE FIRST YEAR.

The paper dealt almost exclusively with gastro intestinal disorders. The author spoke of the predisposing causes of mortality—intemperance, syphilis, etc. In feeding children he believed that pure cow's milk is better than the diluted milk. He objected to the use of starchy foods. If a wet-nurse be selected, she must be carefully watched, as she may neglect her foster-child, or administer an opiate or alcohol. Dr. Greenley considered that mothers who allow their infants to be nursed by hired women are often guilty, unintentionally, of infanticide.

Discussion was participated in by Drs. Sears, Whitney, Watson, Christopher, Brush, Latimer and others.

Dr. E. F. Brush, of Mt. Vernon, N. Y., read a paper entitled

COW'S MILK FOR INFANT FOOD.

Dr. Brush commenced by saying that the medical profession was agreed that nothing equalled good cow's milk as a food for infants, and therefore it was to be regretted that attention had not been given by the profession to reforming the breed of cattle and the handling of milk, than to the question of substitutes for it. In milk for infant feeding there should be considered, 1, the varieties of fats; 2, the amount of albuminoids; 3, the amount of salts; 4, the handling of the milk; and 5, the health of the cow. 1. As regards the fats, he pointed out that the usual processes of chemical analysis led to an underestimate of the fats in cow's milk, and that of these fats we have no late authoritative analysis, a neglect on the part of chemists which leaves us in doubt as to which of the fatty acids are the mischief makers in milk. These fatty acids have more to do with the development of poisons than have the albuminoids, and are the cause of digestive derangements. 2. The albuminoids vary considerably with the time or habit of extracting the milk, milk extracted every two hours not being likely to possess as much or as ripe albumen as that drawn off every twelve hours. In health the al-

buminoids are constant, but materially affected in disease. This change is not surprising when we examine the mammary sources of milk in disease, for then there are found inflammations, calculi, clots of fibrin, etc., while the gland is at the same time subject to infiltrations, tubercular deposits and eruptive diseases. In all cases any variations in the amount of albuminoid must be ascribed to sickness. 3. The salts also have not lately been determined by chemists, and we do not know how constant the occurrence of these salts may be, though we can assert that they are influenced by the health and food of the animal. Hence the land on which a cow is pastured will indicate fairly what we may expect to find as salts.

THE NUTRITIVE VALUE OF THE SUGAR IS OVERESTIMATED,

as is shown by the milk of carnivorous animals. Condensed milk, or concentrated sugar of milk, is not to be recommended as an addition to milk, but cane-sugar should be preferred. The chemist's ideal food is a failure, and the idea that milk must contain such and such constituents in such and such proportions is a popular error. 4. The cow must be studied, "for milk is the scavenger of the cow's body," and if it does not nourish the infant she is sick, or the milk badly handled. A faulty condition of the cow is indicated by the albuminoids, bad food by the fats and salts, and bad handling by the ptomaines. The cow has an abnormally high temperature, her organs of generation are in unnatural activity, and she is made a machine for producing milk. It is no wonder then that she is, as a rule, an unhealthy animal. This delicate animal is rarely, owing to the low price of milk, fed properly, and the same cause compels the farmer to utilize every drop of milk, be the cow sick or well. Good food is the prime essential for producing good milk. 5. Milk is affected by its surrounding in the cow-house, and the method of

GETTING RID OF THE ODOR BY SALTPETRE

cannot be too severely censured, for the addition of the nitre united with the glycerides may produce poisons approximating to tyrotoxicon. No chemical substance should ever be added. Milk should not be conveyed a long distance, for travel deteriorates milk. Light, like heat, hastens decomposition, therefore glass bottles should not be used.

The milk ought not to be given to the infant warm, for then it coagulates like too old milk. Sterilized milk may be employed if we abandon all hope of improving the quality of milk.

To remedy these evils we should have a better cow, not to closely inbred, well fed with good sound food, and well attended to. The cheapness of milk is the reason why we have not better milk, and the inferior milk suggests the use of substitutes. If the price of the latter were added to the price of such milk, the extra money would enable the farmer to buy better cows and better food, and improve the quality of his products. This he ought to be compelled to do. Let us not recommend patent baby foods, but good, high-priced milk, and then if any trouble arises we can lay the blame on the milkman. Dairies for supply of infants' food should be under strict sanitary supervision. Such an ideal dairy should consist of spayed cows.

Dr. Peter Hooper, of Philadelphia, read a paper entitled

INTESTINAL DISEASES OF CHILDREN IN HOT WEATHER.

The author considered the causes of these diseases as mainly heat, impure air and improper food. He believed the local abstraction of heat from the bodies of children suffering from entero-colitis or gastro-enteritis as productive of good. Cold water and ice internally, and cold compresses to the head he considered beneficial. He also believed in cooling the sick room artificially by the use of large pieces of ice. The author gave the history of a baby æt. 8 months, where a temperature of 109.6° F. in the axilla was reduced in half an hour to 105° F. by the application of ice to the spine. The severe nervous symptoms were relived by this treatment, though no medicine was given. Some entero-colitis followed the acute attack, but the child was always more comfortable when cold was used internally and externally.

In speaking of the use of milk-foods, the author related as his experience that the children who use them do not grow so strong, so muscular, or so rapidly as they should. In cases of failure of mothers to nurse their children he advised the use of sterilized milk.

The author mentioned as the possible treatment of the future in cholera infantum the opening of the abdomen and washing out of the intestinal tract. The use of inunctions of olive-oil was spoken of as beneficial.

Dr. H. D. Chapian, of New York, read a paper on

PSEUDO-MEMBRANONS RHINITIS.

The author asked the question if there can be a croupous inflammation of the nasal mucous membrane? Hartmann appears to be the first author to make the announcement that this disease is separate from diphtheria. The author reported two cases that he saw in consultation with Dr. Jonathan Wright. The patients were sisters, æt. 2 and 3 years respectively. The elder child was first attacked; she had been well until two weeks before the time she was seen. She began with a discharge from the nose. Her general condition was good. An examination of the nose showed it to be packed with fibrinous material. The throat was only congested. There was almost no fever, although at one time the temperature reached 101.5° F. The child played around. The baby exhibited about the same course of disease, except that the membrane was much more friable and not so abundant. Neither case presented any evidence of sepsis, and examination of the urine was negative. In view of the cases reported and of the literature of the subject, the author concluded that there is such a disease as pseudo-membranous rhinitis, but that it is extremely rare. He would make a diagnosis on constitutional conditions.

The paper was discussed by Drs. Whitney, Cochrane, S. Solis-Cohen and the Chairman.

Dr. C. R. Early, Ridgeway, Pa., read a paper on

SCARLATINA.

Dr. Talbot Jones, St. Paul, Minn.: paper read by title,

PATHOLOGY AND TREATMENT OF CERTAIN COMPLICATIONS OF SCARLET FEVER.

ELECTION OF OFFICERS.

Dr. I. N. Love, St. Louis, was elected Chairman, and Dr. E. F. Brush, Mount Vernon, N. Y., Secretary.

SECTION ON DERMATOLOGY AND SYPHOLOGRAPHY.

Dr. D. W. Prentiss, of Washington, read a paper entitled,

CHANGE IN THE COLOR OF THE HAIR FROM THE INTERNAL USE OF PILOCARPINE.

He first referred to two cases of his own already published, the first in the *Philadelphia Medical Times*, July 2, 1881, in a lady æt. 25 years, who employed pilocarpine to relieve uremic symptoms resulting from anuria. Her hair changed from light brown to black. The other he published in the *Therapeutic Gazette*, April 15, 1889, that of a lady æt. 72, years. who took jaborandi for disease of the kidneys, whose eyebrows changed from white to black.

The author then quoted cases from German and other medical literature, in which the use of pilocarpine had caused the hair to grow where it had fallen out, in some instances the new hair having a different color from the old.

It had been doubted by many eminent in the profession whether the hair ever changed color suddenly. To settle that question, he had searched the library of the Surgeon-General's office, and found records of indisputable cases. In some the change in color has been sudden, in some not so rapid; in some it was due to fright or other mental influence. He went on to show the change of color of the hair, feathers, or bones of different animals, according to the food which they received, or changes of seasons.

His conclusions were: 1. In the human subject the only agent, as far as he was aware, which had been charged with changing the color of the hair when administered internally was jaborandi. 2. Cayenne pepper, in changing the color of canary birds to orange. 3. The change in color of parrots by the Indians of the Amazon, from green to yellow and red, by feeding with the fat of a certain kind of fish. 4. The restoration of certain birds to their original brilliant colors at the zoological garden, Amsterdam, by feeding a kind of shrimp or small crustacean. 5. The effect of madder in staining the bones of pigs red, and of poke-berries coloring crows' bones purple. It might be of interest to study the influence of diet and habit upon the color of hair in different nations of men.

Dr. L. D. Bulkley opened a discussion on

THE INDICATIONS FOR, AND DURATION OF, THE TREATMENT OF SYPHILIS,

by propounding certain questions: 1. How early should treatment of syphilis begin? 2. Should one wait until positive diagnosis could be made? 3. How long should the treatment continue? 4. How soon could the patient be allowed with safety to marry? 5. When the disease had become thoroughly established, should treatment be continued longer than the presence of symptoms? If so, how much longer?

The discussion was continued in a paper sent by Dr. Ephraim Cutter, of New York,

THE POSITIVE DIAGNOSIS OF SYPHILIS,

read by his son, who said he could confirm all that was stated in the paper. The diagnosis was based on the examination of the blood under a good microscope for the crypta syphilitica, oval spores of a copper color, which had peculiar movements in the blood. One of experience could not mistake the spore for any other which might happen to be in the blood. Its presence afforded unmistakable evidence of syphilis.

Dr. Seiler, of Philadelphia, said that just ten years ago he put the same question to Dr. Ephraim Cutter which he did to day to his son, and received the same answer, that he could not state the measurements of the spore in question. Dr. Seiler thought it was simply broken up blood corpuscles.

Dr. Brush, of Philadelphia, had been able to verify the observations of Dr. Cutter, as had Dr. Matthewson, of New Jersey, and others who spoke.

Dr. Seiler said with regard to the treatment of syphilitic gummata, that he thought it should be continued long after disappearance of the lesions, say two years.

Dr. Corlett preferred to await active treatment until positive diagnosis of syphilis could be made. In a few cases in which he had destroyed the syphilitic chancre, the subsequent course of the disease seemed to have been less severe than usual. Mercury was the only drug with which he had been enabled to obtain permanent relief from syphilitic manifestations.

Dr. Garlock had found mercurial inunctions some times prevent the appearance of secondary symptoms.

Dr. Fleischner, of New Haven, observed that some cases of syphilis were known to run a mild course. That being true, he doubted whether a uniform rule should be made of treating all cases in the same heroic way, continued always two or more years after cessation of symptoms. Treat each case individually.

The Chairman thought it not safe to leave off treatment until two or three years. He sometimes consented to marriage within a year after contraction of syphilis, if during the last six or eight months there had been absence of symptoms, and, in such cases, the disease had not been given to the wife or offspring.

Tobacco Again.—It is said that ten out of twenty candidates for cadetship at West Point were recently rejected on account of tobacco heart brought on by cigarette smoking.—*Med. Compend.*

How to Destroy the Odor of Iodoform.—Dr. Monroe, *Medical Summary*, recommends the use of aqua heliotrope to destroy the odor of this drug. He says by washing the hands thoroughly, then turning the heliotrope water on them, the iodoform smell is entirely destroyed.

An Application for Boils.—Dr. Halle, in *L'Union Med.* of May 14, 1889, gives the following prescription, which he claims, when used according to the directions given below, never fails to abort boils:

℞—Tincture of arnica flowers, - f℥ijss.
Powdered tannic acid,
Powdered gum arabic, - *aa* ʒjss—M.

Paint the boil and the surrounding skin with this mixture every five minutes until the coating becomes thick and hard; the pain will immediately disappear.—*Med. News.*

Rupture of Ovarian Tumor During Pregnancy; Subsequent Removal.—Dr. Rutherford showed the tumor. The patient was æt. 36 years, and had six children. The last child was a year old. For two years previously she had an abdominal tumor, which was left alone. At the third month of pregnancy the tumor burst, with symptoms of collapse. She went on to full term, and had an easy labor. After the confinement she began to suffer pain, and noticed the tumor was rapidly growing. When the case came under his notice the tumor reached the ensiform cartilage. He found an enormous number of adhesions to the liver and to the fundus of the uterus; the whole of the anterior wall of the abdomen was also adherent to the front of the tumor. The drainage tube was removed on the ninth day. The patient made a good recovery.—*Br. Med. Jour.*

Necessity for a General Muzzling Order.—The Contagious Diseases (Animals) Acts Executive Committee of the London County Council have recently reported on the subject of the increase in the number of rabid dogs killed by the police in the streets of the metropolis. They recommended that it is desirable to ask the Privy Council to make compulsory and stringent general regulation for the whole kingdom. They report that the number of mad dogs killed in London during January was 3; in February, 3; March, 5; April, 9; and May, 5; making a total of 22 cases for the five months of the present year. In accordance with this report a letter has been addressed to the Privy Council.—*Br. Med. Jour.*

A New Rapid Process of Coloring the Tubercle Bacillus.—Mr. Gabriel Roux communicates a new method, by Marman, of Liege, which is as follows: After the cover-glass preparations have been made as usual they are dipped for one minute in the following mixture: 1. Crystal violet, 1 gram, alcohol of 95%, 30 c. c., (a few drops). 2. Carbonate of ammonia, 1 gram, distilled water, 100 c. c. (a few cubic centimeters), which is kept at the boiling point during the entire period of immersion. Then wash in water and decolorize for four or five seconds in a water solution of nitric acid, 1:10 for sputa and 1:4 for sections. Then wash in alcohol of 95% and examine immediately. If a double coloring is desired, immerse for one to two minutes in the following solution: Eosine 1 grm., alcohol of 60% 100 c. c. The great merit of this new process is that it is trustworthy, and requires no special degree of skill; it is not any more rapid, nor any more brilliant in its results than its immediate predecessors, but it is more practical.—*La Province Medicale*, May 11, 1889.—*Jour. Am. Med. Ass'n.*

Small-Pox.—Baudon has treated a number of cases of confluent small-pox by the following method, with uniformly good results:

1. The entire body is covered three times daily with the following pomade:

℞—Salicylic acid,. . . . 10 gram.
Vaseline, ... 225 "

2. Powder subsequently with,

℞—Acid salicylic, . . . 10 gram.
Magnesia, ... 220 "

3. Twenty-five centigrammes of sulphate of quinine three times daily.
4. A solution of boric acid for gargarisms.
5. Milk at discretion.—*Balletin de Therapeutique.*

Precocious Menstruation: Amenorrhea with Convulsions.—A case of remarkably precocious menstruation is reported by Dr. Diamant, of Vienna. When a twelve-month old, the child had cut all her milk teeth. When barely two years of age the first period was observed. It lasted four days, and recurred with regularity until the child was six years old. At that age her breasts, loins and pelvis were of the adult type; the axillæ and pubes were thickly covered with hair. Suddenly the period ceased, and for six months after the child had completed her sixth year epileptiform convulsions came on during sleep at every date when the catamenia should have appeared. The fits sometimes lasted three-quarters of an hour, and increased in number every month. They were continuing when the case was reported, the child being then six and a half years old.—*Brit. Med. Jour.*, May 4, 1889.

Bromomania.—The *Lancet* for May 25, points out some of the evil effects that follow the excessive use of the bromides by epileptics. In many cases the patients become wild and maniacal from the prolonged use of the drug, and in the asylums this condition is well recognized under the title of bromomania. In former times the same class of persons continued along about the

same from year to year and did not require to be sent away to the asylums. This was before the bromides became the routine means of treatment in epilepsy at all the various dispensaries and out-patient departments. It is at those institutions, the *Lancet* fears, that much damage is done "by the drenching of the epileptics with the bromides." Then too many of these patients will go from one dispensary to another, and thus get loaded with an amount of bromide preparations that is far in excess of the intent, knowledge, or conjecture of the respective prescribers. When, therefore, a practitioner finds that any of his epileptic clients give indications of an increase of excitability and violence, it will be well to investigate into the amount of their drug-consumption; it may be the invasion of bromomania.—N. Y. *Med. Jour.*

Hypodermic Injections of Blood in Anemia.—Dr. H. Westphalen, in the *Centralbl. f. Therapie*, No. 5, 1889, reports a case of extreme anemia which was cured by subcutaneous injections of blood, according to Ziemssen's method. The case was that of a man, æt. 36 years, whose blood was extremely poor; the number of red corpuscles being only 840,000 to the cubic millimeter. Tonic treatment had been pursued for some time previous but to no avail.

About five ounces of blood were taken from the median vein of a healthy subject, caught in a vessel and defibrinated by stirring with a glass rod, then strained through gauze to remove the larger particles of fibrine, and then injected under the skin of the thighs; about six or seven drachms being injected at each puncture. Then the limbs were vigorously rubbed and manipulated in the direction of the lymphatic stream. The absorption of the blood was complete. No unpleasant symptoms followed the operation. The next day the pulse, which had been 100, dropped to 80. Eight days later the patient's blood was examined and found to contain 1,240,000 red blood corpuscles in a cubic millimeter. In one month he was pronounced cured.—*Med. News.*

Simple Method of Treating Coryza.—Camphor in various forms is frequently recommended for colds in the head, although Dr. George Johnson and others long indicated the dangers attending the use of concentrated alcoholic solutions. The following method of application is suggested in a Swiss pharmaceutical journal, and certainly has the merit of simplicity: A jug is half filled with boiling water, into which a teaspoonful of well-powdered camphor is thrown. A funnel-shaped paper cap is then placed on top of the jug, and a hole torn in it just fitting the nose. The camphorated steam is inhaled through the nose for ten or fifteen minutes, the inhalation being repeated, if required, every four or five hours. If the patient absolutely persists with the inhalation, in spite of its unpleasantness, it is said that three repetitions will always effect a cure, however severe the coryza may be.—*Am. Pract. and News.*

The Use of Anodynes.—To the eye of prejudice every attempt to escape from pain appears to be sinful. The employment of anesthetics during parturition has been occasionally denounced from the pulpit upon scriptural grounds, although it may be doubted whether a similar line of argument has ever induced a cleric to refuse the offer of "gas" made to him by a dentist. The lengths to which prejudice can go when backed by ignorance are well illustrated in the case of "exalgine," the new anodyne introduced by Dujardin-Beaumetz and Bardet. Our readers may remember that our Paris correspondent recently sent us an account of this drug, from which it appeared that it was a methyl derivative of acetanilide and that it was possessed of remarkable analgesic properties, particularly valuable in cases of neuralgia. Already this new drug has fallen under the ban of detractors in the lay press. It has been asserted that exalgine is merely a new name for morphine, chosen for euphemistic purposes. According to another view, it will "probably be a running combination of all other noxious concoctions," and will play an important part as a popular substitute for ether, haschisch, opium, and similar medicaments in the treatment of "feverish languor, lassitude, and lowness of spirits." In view of such random assumptions it may be worth mentioning once more that its chemical composition is expressed by the name orthomethyl-acetanilide, while Dujardin-Beaumetz and Bardet at present only lay stress upon its anti-neuralgic properties without claiming for exalgine the position of a popular panacea, deliriant or narcotic —*London Lancet.*

Edema as a Diagnostic Sign in Carcinoma of the Stomach.—M. C. Baert, of Brussels, writing in *La Clinique*, on cancer of the stomach, calls attention to the frequency with which edema of the ankles is met with in this affection after it has lasted a few months—a diagnostic aid which is by no means new; but is, he thinks, in danger of being too much overlooked at the present day. He gives a number of cases recently occurring in the various hospitals in Brussels, in which edema was present. In one of these cases the edema came on as early as three months after the first symptoms of the affection made their appearance ; in two other cases it was noticed after four months ; but in most of the other cases it was delayed till the lapse of from six months to a year after the onset. In one case, where there was no evident cause to which to attribute the loss of appetite and the wasting complained of by the patient, Professor Carpentier, noticing some edema of the ankle, diagnosed carcinoma of the stomach, and found his diagnosis confirmed by the appearance a month afterward of all the usual signs of the affection. Several of the cases presented a marked increase in the nitrogen excreted in the urine. With regard to the deficiency or absence of hydrochloric acid in the stomach in cancer of that organ, Mr. Baert admits that it is usual, but agrees with Wolff and Ewald in

saying that this sign is by no means peculiar to cancer, as it is found in other gastric affections.—*London Lancet.*

Treatment of Ingrowing Toe-Nail.—Ingrowing toe-nail is, no doubt, most rapidly and effectually cured by avulsion of the nail. The operation demands general or local anesthesia, and is not lightly undertaken in private practice. I venture to suggest a plan of treatment which is rational though not rapid, free from risk and almost painless. In my hands the results have been excellent, and the cure, so far as I have been able to ascertain, permanent.

Removal of the tender nail, entirely or in part, from the raw flesh or tender granulations is the essence of the radical and the chief aim in all treatment. In the following method of treatment the aim is rather to remove the granulations from the nail.

Supposing the patient's left great toe is effected and on its inner side. I first wash and dry the parts, and then thoroughly rub the granulations with nitrate of silver. Since the introduction of cocaine this proceeding can be rendered practically painless. I next cut small pieces of fine Turkey sponge, and press them well down between the nail and the granulations, inserting a small piece beneath the inner free edge of the nail. Pressing this sponge-pad downward and inward I fix it in place by winding a long narrow strip of plaster round and round the toe, commencing from the outer side, my aim being to compress the granulations and draw them as far as possible from the nail. Turkey sponge is by far the best material for this purpose, being soft, absorbent and elastic. A soft, easy shoe should now be worn, and the patients can pursue their ordinary avocations without risk. Some aching pain often follows; but this is soon succeeded by a considerable feeling of relief.

The dressing should be removed and the process repeated in two days' time. A sulcus will then have formed between the flesh and the nail and on removing the crust formed by the nitrate of silver, a healthy ulcer will be found to have replaced the exuberant granulations.

On the fourth or fifth day, after well soaking the toe, I apply cocaine, and endeavor to insert a small piece of sponge beneath the edge of the nail, which is now more fully exposed, or a piece can be removed with fine scissors. A mixture of iodoform and alum is now dusted in, and the sponge compress applied as before. In a week or ten days' time the process is repeated, especially if the ulcer is not healed. After a similar interval, the raw, tender surface will be found to be hard and painless. It is well to continue treatment a little longer, for it is painless, and the dressing can be worn for two or three weeks.

In 1880, when house-surgeon at the Tiverton Infirmary, I treated five patients in this way, two of them being bakers' assistants. The relief in each case was immediate and the cure complete and no relapse had taken place at the end of six months. My recent experience has been limited to three cases. One patient was passed on to me by Mr. Parker. She was a poor, hard-working woman, and both toes had been affected for two years. She had been treated at various times but without success, and she complained bitterly of the pain and inconvenience. The above method of treatment was carried out during a period of five weeks, when she was discharged cured. I saw her six months afterward, and no relapse had taken place. During treatment she continued her household duties with comfort.—*Brit. Med. Jour.*

THE HOSPITAL INTERNE.

BY JOHN S. HAWLEY, M.D., NEW YORK.

Erudite in physiology and advanced bacteriology, the interne talks pathology till you're deafened by the din,
And of differences essential between high and low potential, and of diagnosis differential of diseases of the skin.
All the signs auscultatory, cardiac, respiratory, are arranged in category his active mind within,
From pyosalpinx gonococcic,he gestation that's ectopic,tells by murmurs metroscopic, and he knows when it is twin.
He knows pelvic cellulitis from acute oophoritis, and from hernia, adenitis, be the patient fat or thin,
Or a pachymeningitis from a poliomyelitis, and a typhloenteritis at its very origin.
And he knows an epileptic from a seizure cataleptic, and a coma apoplectic from one caused by drinking gin.
Also knows tuberculosis from actinomycosis, and how cnemoscoliosis doth distort the youthful shin.
He discribes the diabolic agony of renal colic; how aphasia embolic rests the weary, jaded chin;
How luxated hip reduction you achieve by circumduction after ad-and then abduction, if with flexion you begin;
And of kolpoecpetasis, dysmorphosteodiaclasis, and of teleangeiectasis many startling yarns he'll spin.
Of nephritic amaurosis, also of symblepharosis, and of intermittent ptosis, which to winking is akin;
Of his skill in pediatrics, and in modern psychiatrics, of *vis Nature medicatrix*, which the palm will always win
In the strife with mind-revealers, and with Christian science healers, or with long-haired faith-cure kneelers, who say cancer is but sin;
With interviewers theosophical of Indian ghosts apochryphal, who from climates hypertropical come to practice medicine;
With those with eyeballs staphylomal, who in trances hippodromal voice the accents catacombal of some sainted mandarin,
Who prescribes, for use internal, roots you dig with rites infernal at the moment mid-nocturnal with a piece of rusty tin.
He detects each spinal lesion, every visceral secretion, from the ammoniaco-magnesian to that of pure cholestrin;
Describes the splint of his invention by which he keeps up firm extension. attaching rubber bands in tension to a stationary pin.
Armed with weapons stethoscopic, spyymographic, microscopic, like a very philosophic, scientific palladin,
Seeks he ulcers duodenal; rends he pectorals trichinal; spears the abscess circumrenal with hypodermic javelin.
He's no Dedalus with wings rheumatic, who, as in the soup his son erratic learns a lesson aerostatic, flies low down with rueful grin,
But, like Icarus, he's sophomoric; his flight at first is meteoric, 'till solar beams so thermophoric melt from his wings their parraffin.

ORIGINAL ARTICLES.

ALCOHOL AND THE NURSING CHILD.

BY J. A. DE ARMOND, M.D., LE CLAIRE, IOWA.

Annual Address by the President of the Illinois and Iowa Central District Medical Society.

In lieu of the usual address upon the general progress of the medical sciences customarily followed in the papers of retiring officers, I desire to briefly call your attention to the consideration of a question which I trust is not too trite to merit brief notice, or too commonplace to call for a thought. It refers to the use of alcoholic beverages as aids to the promotion of the lacteal secretion in nursing women.

Popular belief, largely founded on professional opinion, has recognized in beer and ale energetic promoters of the lacteal secretion. While there are differences of opinion as to the value of these articles, just as there are differences of opinion as to the measure of the strength-giving elements of the secretion, and while there are grave doubts as to the danger of the formation of a habit which the mother cannot break, yet it is of the influence on the child more especially that I desire to speak.

Laying aside, as being immaterial to the pre-ent consideration, the disputed points as to the nature of alcohol, whether it is a stimulant *per se*, or a stimulant because of its irritant effect on the inhibitory nerves, we are forced to ask what are the effects on the child of the drinks which professional preference has largely sanctioned for nursing women? These drinks contain from 4 to 10 or 12% of alcohol. This amount, it is argued, is so small that it is not the alcohol that en hances the value of the drinks. Aside from the alcohol which these drinks contain, there is nothing that can be extolled as valuable except bitter extractions which are to be found in many beverages not nearly so popular. Beer contains 4 to 6% of bitter extractions, and generally a greater per cent. of alcohol than bitter. The home-made beers, albeit they may abound in bitter extracts, are seldom lauded as promoters of the lacteal secretion. We are then forced to the conclusion that it is largely due to the effect of alcohol, that preference is had for ale and beer by nursing women, and advised by medical counsellors. The drink chosen, then, contains alcohol, and it is but a whip to urge on the vegetative functions. This is increased secretion of all the organs. It is claimed by some investigators that the effect on the lacteal gland is to increase the quantity but not the quality; in other words, that it is the watery portion of the milk that is increased and that while there is apparently an increase of the secretion, there is no real increase of strengthening and nourishing milk. If this is true, it would add greatly to the objection to the use of a stimulant which, like all stimulants of an irritant nature, has a period of depression equal to the period of excitement.

The effects of stimulation are made manifest wherever the blood goes, and it goes everywhere.

Physiologists tell us, and daily observation confirms the statement, that alcohol has a predilection for nervous tissue in the human body. It manifests this choice for the nervous structures and affects them soonest, and the effect is longest maintained. When these beverages are taken into the stomach of the nursing woman the alcohol is rapidly taken up by the stomach, owing to the dilution, and as rapidly swept into the current of circulation and soon appears in all the secretions and excretions. Some of it goes to the milk and the child gets it. Those who favor beer because of its apparent value in aiding a failing milk supply argue that the amount of alcohol which finds its way to the child is so small as to cause no injury. When we recall the effects of nervous excitement in the mother on the child, and the further fact that the use of particular articles of food occasions serious disturbance in the nursing child, it will be seen that in the physical structure of the child, there is a much nearer approach to primitive organization than future change suggests. To the system of the child a very little stimulant has a remarkable effect, in that there is not the structural vigor necessary to resist its influence. Take, then, that other fact, that alcohol manifests its effects longest on nervous material, and we have a powerful disorganizer at work on a nervous system in its almost chaotic state. Before going farther in considering the effects on the nervous system, let us notice the effects as exemplified by heredity.

Modern pathological research has given to hereditary alcoholism a place, and investigation and study are fast extending its boundaries. From the days of Aristotle and Pluto to the present, the influence on the children of alcohol using and abusing parents has been remarked. There has been a great advance in the thought and a widespread application of the truth that alcohol stamps itself upon the features and molds itself into the life of the unborn, while future generations do not escape the curse of its influence. There is no dispute as to the remote effects of alcohol upon the human economy and its individual influence as a destroyer. It is no longer held that alcohol-using and abusing parents' offspring will always inherit an appetite for strong drink. In a large proportion of cases such will not be found, but there will be found to be such mental alienation dependent on nervous change as will account for a large number of cases of mental instability and unsoundness heretofore uncatalogued. Anstie is of a "firm conviction that particular causes of nervous degeneration affecting individuals do frequently lead to the transmission to the offspring, an enfeebled nervous organization which renders them peculiarly liable to the severer neuroses, and also makes them facile victims of temptations to

seek oblivion in narcotic indulgence." Also that "nervous enfeeblement produced in an ancestor by excess in drink is reproduced in the descendants with the effect of producing insanity in one, epilepsy in another, neuralgia in a third and epilepsy in a fourth."

The hereditary influence of alcohol being clearly due to the effect on the nervous structure, and defective nervous structure being unable to withstand the nervous shocks incident to mature life, it is apparent that the same causes applied under different circumstances may give rise to similar effects, provided the action is maintained at a time when the ability to resist is least and the possibility of injury greatest.

All authorities deplore the effects of continued convulsive seizures in childhood, because of the tendency to establish habit, or cause permanent injury to the brain as manifested by suspended development. "As the twig is bent, so is the tree inclined," finds quite as worthy proof in the animal world as it does in the vegetable. When we come to understand the causes for mental unsoundness, we may easily place each cause after its legitimate effect; and the strides made in mental pathology in the last decade warrant the belief that the time is not far distant when the morbid forms of mental development will be amenable to correct interpretation as are the injuries of the brain told by the effects on the the physical organism now. This we do know, that mental soundness means physical purity and physical purity means the employment of food suitable to the wants of the human economy. Since alcohol does not supply any worn-out part, it is a food only by analogy, in that it prevents the rapid excretion of worn-out tissue. It does not prevent waste of tissue nor wearing out of tissue. Granting all that its most devoted advocates claim for it, it cannot furnish the healthy growing body with anything it needs. It is not a tonic, for as Dr. Billings says: "Tonics give strength; stimulants call it forth. Stimulants excite action but action is not strength."

I am well aware of the prejudice existing against the arraignment of alcohol. It is so systematically regarded as a political question that it is equally systematically avoided in professional discussion. For my part I see no reason for this studied avoidance of the subject or the handling of it with gloves. How best to limit and control the evils of inebriety are largely matters of opinion, and every man has his idea and he has the same right to it that every other man has to his opinion. That this state of affairs should interfere with the study of the baneful effects on any class of patients, is to be deplored. It surely is a matter of regret that the opinions held upon the legal regulation of the liquor traffic should prejudice us in favor of its superiority as a harmless beverage or as a dangerous poison at all times. It is only by the calm and careful study of the effects of alcohol that we may arrive at the truths concerning it which prejudice, bigotry and political preferment render doubtful.

The last dozen years have given birth to the systematic study of the diseases of juvenile life in a way that bids fair to lay bare the truths which underlie physical perfection and mental beauty. Heredity and the study of the ramifications of transmitted physical and mental traits must do more for the upbuilding of the race than all other factors combined. We are fast learning to look upon crime as the outgrowth of ignorance. Ignorance and neglect of the laws of heredity are bringing into the world children physically imperfect and mentally irresponsible. It is a false civilization that hangs a man for following the road mapped out for him by parents who begot him in sin and reared him in ignorance and in crime.

Consumption and scrofula and all the other taints of system are bound to manifest themselves in some form by heredity, and yet while we deplore their spread, we work at the wrong end of the line to correct the trouble. It is only by controlling the supply that the crop can be lessened.

Limited observation and study have satisfied me that harmful results often follow the careless and needless use of questionable means to secure ends attainable by less dangerous methods. Alcohol is too relentless a master to be made a servant of; except in unusual contingencies, and that, to our professional door, is laid the charge of some of the habit of drinking, is warning enough that the trail of the serpent is traced. The immediate effects do not render the mediate any the less important or worthy of consideration.

In view of the fact that in a large percentage of the cases where some aid is needed to assist in promoting the lacteal secretion necessary to properly nourish the new-born child, it will be found that exercise and suitable food will seldom fail to secure the desideratum.

In any event the reckless prescription of agents whose remote effects are so doubtful for good and probable for harm, is not the plan likely to bear fruits to the honor and glory of a profession whose greatest desire should be to know the truth and teach it to the people.

PERMANGANATE OF POTASSIUM; ITS ACTION AND USES.

BY J. H. M'CASEY, M.D.,M.C.P.S., CONCORDIA, KANSAS.

There appears to be great diversity of opinion regarding the therapeutic value of permanganate of potassium. In my hands this drug has proved both valuable and reliable. Lacerda was the first to show that, when brought in contact with snake poison, it readily and effectually destroyed its toxic power, but when given by the mouth it had no effect on such poison. On coming in contact with organic matter it quickly decomposes and its power is lost. When put up in solution, pure water should be used and no other drug should be combined with it. Fresh solution should be made every three to six days.

When taken into the stomach in concentrated solution, it produces heart burning and vomiting. But when taken in doses of gr. 1 to 2, diluted with half a glass of water, no irritation or inconveniece is experienced in the great majority of cases. Permanganate of potassium is contra-indicated in acute inflammation of the stomach, but may be used in chronic gastritis, accompanied by fermentative changes in the food. Dose, gr. 1 in pill three to four times a day after meals. Here it heals the mucous membrane, prevents fermentation and relieves insufficient oxidation of the food, as shown by decrease of uric acid in the urine. It is stated on high authority that it favorably influences the glycogenic function of the liver and promotes oxidation in the tissues and therefore should be a valuable agent in the treatment of diabetes mel litis.

As originally suggested by Sydney Ringer, its chief internal use is in the treatment or amenorrhoa.

In sudden cessation of the menses, whether due to cold, anaemia, grief or deficient activity of the menstrual apparatus, it will restore the flow with great precision. It is contraindicated, however, in congestive and asthenic amenorrhea. When the menses cease on slight cause it indicates a debilitated condition of the organs and the drug should be taken in moderation for some time. I have found this drug beneficial in cases where the periods were regular in point of time, but the flow was either too great or two small. In anemic or chlorotic females it is well to administer tonics such as iron, arsenic, phosphorus barks, etc., for several months. Iodide of iron is especially valuable where a strumous diathesis is present. Mode of administration: Take one grain in pill every four to five hours with half a glass of water after each dose. A sitz bath—a vaginal douche as well as a warm enema once or twice a day for a few days once in three or four weeks have proved valuable aids in the treatment of amenorrhea.

It is important to begin the treatment, if possible, three or four days before the expected sickness.

Mrs. L., æt. 23 years, first menstruated at the age of 15 years; being fearful of her mother's wrath, removed and washed the stained linen. She redressed with the same cold and wet clothing. The catamenia did not reappear for about three years after this. The lady married and in due time gave birth to a child. The catamenia appeared but once during an interval of three years, which intervened until the birth of her second child. Eighteen months after birth of second child, I was consulted with regard to lame back and other symptoms of suppressed menstruation from which she suffered more or less for eight years. I ordered a mixture of iron and strychnine as a tonic and gave a one grain pill of permanganate of potassium two or three times a day. She used the baths and vaginal douche for a few days, once in three or four weeks. Under this treatment the catamenia returned in six weeks and have remained regular since—a period of two years.

Miss A., æt. 22 years, gave almost similar history with regard to menses. Under treatment outlined above, normal menstruation was restored in eight weeks.

Miss N., æt: 17 years, consulted me on Thursday, with regard to amenorrhea, of three months standing. She had been under treatment for two months in a western town. I gave her one grain pill pot. permang. four to six times a day; used vaginal douche and enema of tepid water three times a day. Internally I ordered teaspoonful doses of equal parts of tr. soc. aloes and tr. myrrh to relieve constipation. In thirty hours she flowed four ounces. Her cousin, in playing with her, dashed cold water down her neck, which chilled her and checked flow for eighteen hours, but on continuing the treatment, the flow reappeared and constituted a natural period.

Local Action.—When applied to the skin it stains it brown. Applied to on abrasion it causes smarting and burning and is slightly caustic. Its action is chemical-antidotal, but not physiologically antagonistic.

It must therefore be brought in direct contact with poison to exercise any influence. By virture of its oxidizing power it is deordorant and antiseptic. In sloughing phagedenæ, unhealthy ulcers and impending gangrene, applied in concentrated solution, it is of signal service. Used in saturated solution as a caustic, it has the advantage over other agents of this class of pursuing and attacking unhealthy tissues.

A girl, æt. 7 years fell from a stairway five months previously and sustained a severe cut on the head. The injury evidently had not been properly dressed and as a consequence had raised into an unhealthy granulation tissue the size of half a walnut. The history showed that physicians had applied various caustic and oil dressings. I poured out some permanganate of potassium on the bottom of an inverted tumbler, adding enough water to make a saturated solution. I dipped a portion of absorbent cotton into the mixture and applied it to the sore for about five minutes. I repeated this operation daily for three to five days. At the end of twelve days the sore was healed.

Dr. P. had an indolent, superficial sloughing ulcer on his leg which had baffled the skill of many physicians, as well as his own, for years. I applied a saturated solution of pot. perman., with brush or feather every other day for twelve days. I kept away all greasy applications. (I believe greasy applications when continued for many months, favor the growth of unhealthy granulations.) I also applied rubber bandages. In six weeks the ulcer was entirely healed.

J. P. D., æt. 30 years, was suffering with ranula complicated with violent cankered sore mouth. I ordered a mouth wash gr. ss. pot. perman. to ℥j of water, to be used every two to four hours. The mouth was well in two days.

Girl, æt. 8 years, was suffering from cerebro-spinal meningitis. I administered fl. ex. Ergot, ʒ iij, daily in twelve doses for four days with good results on the dis-

ease, save the appearance of gangrene about the gums and fauces. I discontinued the ergot and swabbed the mouth every four hours with solution grs. ij to ℥j. Gangrene was arrested in forty hours.

In mercurial salivation it is the best of all washes. I often use a few grains in a glass of water as a mouth wash in continued fevers where the breath emits an offensive odor. In threatened gangrene following amputations, I have used it with gratifying results.

The concentrated solution failed to benefit a tinea sycosis of the upper lip.

G. H., æt. 40 years, married, on examination showed nine soft chancres. I touched each gently with lunar caustic and applied absorbent cotton moistened in a solution of pot. perman. grs. xv to ℥j. I ordered the solution applied momentarily every other day and carbolized vaseline to be applied during the intervals. The cure was complete in eight days.

In gonorrhea an injection of gr. j to ℥j, four to five times a day, during the first week, or hydrarg bichlor, gr. ¼ to ℥j. At end of first week increase strength of pot. perman. to grs. ii or iii to ℥, and make one injection every other day. During the intervals astringent injections, as sulphate of zinc, sugar of lead, etc., may be used with excellent results.

Permanganate of potassium grs. 1 to 2 to ℥j, as a vaginal douche twice daily, has served me well in the treatment of leucorrhea. Except in very weak solutions this drug should not be used locally oftener than once in two or three days, for if employed frequently in strong solution it is an irritant.

A CASE OF TUBERCULAR MENINGITIS PRESENTING SOME POINTS OF INTEREST.

BY E. W. FENITY, M.D., FAYETTE, ILL.

February 26, 1889, I was called to see a young lady, æt. 19 years, who had never menstruated. Examining the case I saw a patient of at least average size and development, with whom, as reported, there had been no appearance of menstrual flux at any time, and aside from some little dragging pain in back and bowels occasionally, there had previously been a feeling of perfect health.

At this time patient experienced a general feeling of languor, and became dizzy upon moving about much. There was some anemia, no rise of temperature, constipation and a good appetite. There was also occasional vomiting after eating or taking medicine. Could discover no organic trouble, not even with the lungs, after careful examination. I prescribed out door exercise, frequent baths, and put her on cod liver-oil, iron and elixir lactopeptine.

The patient remained in this condition, varying but little except that the vomiting became more troublesome until May 23, when I was hurriedly called to the case. I then found about the same train of symptoms as previously described except that the vomiting had entirely ceased, and there was a severe throbbing pain in the temporal regions, pulsations of carotid very distinct, some opisthatonos and temperature of 102°.

I diagnosed a case of meningitis, and as there was a history of tuberculosis in the family, supposed it to be tubercular in its character. I again examined the lungs but could detect no trouble with them. There had been on cough, no night sweats and previously no fever. I made a very doubtful prognosis and informed the family that I could see no cause to hope for her recovery. I placed her on syr. ferri. iodi. and a bromide and ergot mixture.

On the 24th could detect no change in her condition. Mother reported a spasm, from description, probably a tetanic convulsion. I had them push the bromide and ergot preparation. applied sinapisms to extremities and ice pack to head.

June 1st I was present when she had two convulsions tetanic in character, which left her prostrate, but she rallied after a time. I blistered freely, added warmth to the body, and continued previous treatment. By this course of treatment I was successful in keeping down all convulsive tendencies during the further progress of the disease.

Patient remained in what might be called, a comatose condition, rousing up completely when spoken to, taking medicine readily, recognizing and talking to those around her, but as soon as left alone lapsing into a stupid condition. The hydro cephalic moan or cry was nearly continuous at this stage of the disease.

At some time each day the patient would rouse up, and appear to be improving for a varying length of time, but would at length lapse into her former condition.

June 14 I noticed some divergence of pupils. From this time on there was little change in her condition, except an increasing weakness, until June 15, when a lethargic condition supervened, attended with difficult respiration and dilated pupils and in this condition the patient passed away on the morning of the 16th.

The disease must have been meningeal inflammation, and, judging by its paroxysmal character, tubercular. If this be true I would ask if the amenorrhea was due to a previously existing tuberculosis, and if tuberculosis be not hereditary through what medium did the meningeal infection come?

Hemostatic Collodion.—The following formula for hemostatic collodion, which is given by Dr. Paresi, in the *Revue de Ther. Med. Chir.*, May 15, 1889, will be found very valuable as an application for abrasions and superficial wounds:

℞	Collodion	100 parts.
	Phenic acid . . .	10 "
	Tannin } Benzoic acid } . .	aa 5 "

Apply with a camel's-hair brush.—*Med. News.*

TRANSLATION.

SOME POINTS ON THE EXAMINATION OF URINE.

BY DR. J. RUHEMANN.

Translated by Dr. B. von Steinmetz, St. Louis.

Notwithstanding the fact that the examination of urine is usually simple, and the reaction for albumen and sugar clearly defined, there are many cases in which the practitioner is in doubt whether or not albumen or sugar is present. Of course it is not difficult to recognize marked pathological changes in the excretion, but it is of the utmost importance for the early diagnosis of disease, to detect the first minute traces of these morbid constituents in it. To recognize slight deviations from the normal state of the urine does not require more time or work than to detect gross changes. It is therefore within the reach of even the busiest practitioner, who can devote but little time to this work, to satisfy himself as to the presence or absence of these dreaded elements, and he need not refer to experts, if he will only employ the means at his command. The difficulty of recognizing and verifying small traces of morbid constituents, shows the necessity of making use of several reagents, because by this means only will satisfactory results be obtained. If for the test of albumen or sugar only one reagent is used, the proof of the presence of either of these elements will be doubtful and the diagnosis uncertain. For example: How often in employing acetic acid and heat as a test, is there cloudiness of the specimen, which may not only be caused by the presence of albumen, but also by pus, mucus, hemo globin or uric acid? To base the diagnosis on this result, simply, would be a great wrong to the patient, and yet it is done every day. To be absolutely sure of the presence of albumen, the test should be made with such reagents as will exclude the above mentioned elements; in this connection may be mentioned the picro acetic acid test, which is also used in quantitative analysis, and the acetic-ferrocy anide of potash test. Another test, which, for simplicity and sharp definition, is fully equal to the last mentioned, is the acetic acid sodium chloride test, which may be made as follows: Filter the urine if cloudy; to the filtrate add one drop of acetic acid, and three volumes of a saturated solution of sodium chloride; boil; if there be a trace of albumen present, the specimen will be cloudy. To exclude any possible error, acidulate another specimen of the filtered urine with nitric acid and bring to a boil; if the urine remains cloudy, there is absolute proof of the presence of albumen; if, on the other hand, the specimen quickly turns to a dark red or brown color, there is an excess of uric acid present, which also causes the cloudiness in the chloride of sodium solution. Although every specimen of urine, if nitric acid be added, is gradually colored red or brown, still the presence of an excess of uric acid will effect this very quickly. The microscopical examination of suspected urine should never be omitted, and not only should the sediment be examined for blood corpuscles, pus cells and other morphological elements, but the supernatant fluid should not be neglected; a look into this instrument will often give us a clew to the detection of early changes which are otherwise difficult to recognize, unless quantitative analysis is resorted to. For the latter purpose, two specimens are necessary; one is examined in its fluid state; the other is prepared by letting a few drops of the urine evaporate spontaneously on a slide, without heating, as, should this be done, the finer crystals would decrepitate and the examination would show no result. Urine of absolutely healthy persons examined by this method contains only amorphous scales, and occasionally uric acid and sodium chloride crystals; the latter are rectangular, white, shining tablets. If these preparations show an abundance of crystals, then the urine is in a pathological condition, and important conclusions may be drawn from the amount and character of the crystals. These dry preparations are of the greatest importance, because of the abundance of the crystallized salts they show, which in the fluid preparation are dissolved or only found occasionally; we see, for example, many dozens of oxalates and urates, where in the fluid slide we only find a single one; and we can form our diagnosis accordingly.

To obtain the best results, a magnifying power of from 300 to 700 diameters should be employed; the lower power for locating the object, and the higher one for carefully examining and classifying the crystals. Small shining objects are often seen with the lower power, which seem to have no shape or significance, and which, when examined with a diameter of 700, are shown to be oxalate crystals.

The test for the presence of sugar in small quantities is more difficult of demonstration, especially if the old method is employed. The best and most certain sugar test is Fehling's solution; but to be reliable it must be fresh. This solution is generally bought of the druggist, who manufactures it in quantities of from a half gallon to a gallon, and then retails it as required. If this solution has been kept for any length of time, a reduction may take place on heating which makes it unfit to use as a test. It is therefore important in order to be sure of the accuracy of the test, always to begin the test by examining the condition of the solution. The test tubes used must be absolutely clean, because any particle of dirt may possibly reduce this test solution. Pour ten drops of the reagent into a clean test tube, and add enough distilled or filtered water to color the fluid an azure-blue tint; heat until the first bubbles are given off and wait for about a minute; if no changes occur in this time, add two or three drops of the suspected urine. If no sugar be present the blue color will undergo absolutely no change; but if the urine contains sugar, even in the minutest quantity (1:1,000,000), there will be a pronounced reduction. The vividness of the reaction will depend on the quantity of the glucose

present, and practical information as to the percentage of sugar present may be gained from the promptness and intensity of the reaction produced. Great quantities of sugar (2 to 5%) show the reaction instantly, filling the fluid with reddish yellow clouds. Occasionally there is only slight redness; 0.1—2% of sugar shows the reaction in from 5 to 10 seconds plainly.

The physician can but very seldom obtain a fresh and reliable solution in the drug stores, and it is therefore of advantage to prepare the fresh agent, or a good substitute extemporaneously; this can be done in the following manner: Take of crystallized sulphate of copper, 2 parts, and of mannite (crystallized sugar obtained from manna), 1 part; rub well to a powder and keep in a dark bottle.

To use this powder, dissolve a very small quantity of it in a test tube containing 10 or 15 cm. (two or three drachms) of water; heat moderately and add sodium hydrate in excess; this will give an azure-blue fluid, which acts in the same manner as Fehling's solution and without the inconvenience of spontaneous decomposition, to which the latter is liable. Two or three drops of urine, added to this and heated, are sufficient to prove the presence of grape sugar. This is the simplest and most exact test for the presence of glucose in the urine, and is at the same time one which every physician can apply at the bedside or in the consultation room in a very short space of time. The test-powder can be kept in a small vial and carried in the pocket; likewise the fused caustic soda or potash, which can be pressed into tablets and carried in this way, ready for instantaneous use by dissolving in some clear water.

Another good test for the presence of grape sugar in urine, which is equal in its result to the fermentation test and is not influenced either by uric acid or albumen, is the following: Take equal parts of urine and ammonium hydrate, add several drops of lead acetate until a grayish-white precipitate is formed. Upon heating at any point of the precipitate until bubbles are given off, a rose red spot will form and the intensity of color will be in proportion to the percentage of sugar present.

To get a reaction with less than 0.2% of dextrose in the urine, it is necessary to add to the ammonium hydrate and lead acetate, one drop of dilute sulphuric acid, and the reaction will show itself in a yellowish spot at the point where heat is applied. The stain caused by the reaction is easily removed with nitric or dilute acetic acid.—*Deutsche Medicinal Zeitung*, June 17, 1889.

Sulphonal and Our American Laws.—Owing to competition among manufacturers abroad, the price of sulphonal in Germany is said to be only forty-five cents an ounce. In this country our law protects a foreign patantee, and Americans have to pay $2 per ounce for the drug.—*Med. Rec.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,
Editor

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

Communications relating to subscriptions and advertisements should be addressed to J. H. Chambers, 914 Locust Street, St. Louis.

Original Articles, Reports of Cases, Correspondence, etc., relating to interesting medical topics, are cordially invited.

Illustrations will be furnished free when drawings accompany the contribution.

Contributors desiring reprints can obtain them on favorable terms by applying to the publisher immediately after their articles have been accepted for publication.

Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, JULY 20, 1889.

More Anent Brown Sequard's Discovery.

At the meeting of the Societe de Biologie of June 8, M. Brown Sequard read a letter he had received from a homeopath, who claimed to be the originator of a method of treatment very similar to the one of which Brown-Sequard had spoken in the society at two previous meetings. This gentleman, in his treatment, had made use of fragments of tissue corresponding to the tissue or organ which was affected, drying them in an oven heated to 70° C. He used brain matter in affections of the cerebrum, portions of testicle in orchitis, etc. Brown Sequard in answer stated that this constituted a veritable roasting and had nothing in common with his own system.

Referring to his previous communications, he said that his hope of being able to experiment on a woman by injecting ovarian fluid, had been realized; and that she seemed, at that time, none the worse for it. As for himself, he still observed the good effects of the treatment, although it had not been renewed for sixteen days. He had already received two letters from professors outside of France who intended to practice the injections on themselves and would report results.

Most of the French journals have infused much jest and raillery into their comments on the reports of the eminent physiologist, but the Lyon *Medical*, one of the leading medical publications of that country, refuses to be tempted into such jocosity, but thinks that the epoch which has enabled us to discern between the real and the fictitious in the domain of hypnotism should prepare us to give earnest attention to experiments which do not conflict with any physiological probability; the more so as the eminent author subject states specifically that he does not claim to have established any renovation of the organs—not even that which could the term rejuvenation; but it is purely a dynamical effect.

Treatment of Renal Insufficiency.

According to Huchard (*Rev. Generale de Therap.*), two therapeutic indications present themselves:

1. To favor, by the kidney at first, by the supplementary organs, intestines, skin, afterward, the elimination of toxic substances.

2. To diminish by an alimentary regime the quantity of toxic substances introduced into the organism, and at the same time to combat that toxicity.

To fulfill the first indication, it is necessary to resort to diuretics and purgatives, and stimulate the activity of the skin by frictions, jaborandi, vapor baths, etc.

In carrying out the second indication, all toxic substances must be carefully proscribed. Moreover, all viands, and especially fish, which are prolific of ptomaines, bouillons and broths, which are "nothing but solutions of poisons," according to Gaucher, must be suppressed. Milk and all preparations or products of milk, eggs and a vegetarian diet, are advisable.

There are ptomaines which form in the stomach in consequence of the fermentation often undergone there be the various elements; whence comes the patent therapeutic indication to suppress this fermentation and destroy the toxic substances. This may be attained by the use of chloroform water, endowed with antiseptic properties by the addition of preparations of naphthol and salicylate of bismuth, after the formula of Bouchard:

℞ B. Naphthol, gm., 7.50, - (112 grains).
Bismuth salicylat., 15.00 - (ʒ3¾).

M. Div. in pulv. No. xxx. S. One powder with each meal. Or:

℞ Bismuth salicylat., aa gm. 5, (75 grains).
Magnesia salicylat., aa gm. 5, " "
Sod. benzoat., aa gm. 5, - " "

M. Div. in pulv. No. xx. S. One at the beginning of each meal.

Carbolic Acid in the Treatment of Carbuncle.

Carbolic acid has been used in the treatment of boils, carbuncles, etc., for several years, the mode of its application changing every once in a while, to suit the ideas of the various operators.

Arnozan and Lande have recently reported (*Jour de Medecine de Bordeaux*) some remarkable successes from the subcutaneous injection of the following solution:

℞ Glycerine, neutral, 30%,
Distilled water, aa., - - - ℥ss.
Crystallized carbolic acid, - mxlv.

In one, a woman, 65 years of age, affected with an enormous carbuncle of the back, the case was desperate at the beginning of the treatment. A teaspoonful of the above solution was injected into the inflamed zone at various points. That represented, in all, 8♏ of pure carbolic acid. Much pain was experienced at first, but before the next evening, the amelioration was quite evident.

At this time, five drops of the solution were injected into three places; the third day, three drops, and the fourth, fifth and sixth day, two drops were injected. From that time, convalescence was definitely established. So that the benefit that was derived was not more remarkable than the rapidity with which it was effected.

This is certainly a less severe and radical measure than the cutting and curetting that has been so extensively advocated lately. Old people cannot stand such operations, neither will they submit to them readily. In the case mentioned, notwithstanding the large amount of the acid employed, no symptoms of intoxication appeared. The urine was slightly colored, however.

During the last winter, Prof. Verneuil, of Paris, suggested a most admirable method of applying carbolic acid in this affection. It was to direct a spray of 2½% carbolic solution directly onto the inflamed area, for an hour at a time, twice a day. We embraced opportunities for testing the method in several cases at the City Hospital. The first effect noticed was a pronounced diminution in the spontaneous pain from which the patient may have been suffering. He would not fail to put in an early appearance for the succeeding treatment. Inflammation was allayed and the duration of the affection was shortened. It is probable that if it were applied early and persistently enough, it would abort the development of a carbuncle entirely.

A continuous spray, such as may be obtained from a steam-coil, is much more effective than that from a hand-atomizer.

It is supposed that the constant impulsion of the spray against the tissues conduces to its more rapid absorption and the anti microbic effects of the acid are thus attained in a less unpleasant way than in the use of the hypodermic syringe.

Semi-Annual Meeting of the State Board of Health of Missouri.

The regular July meeting of the State Board of Health was held at Jefferson City on the 11th and 12th instant, the members present being, Wm. Gentry, of Sedalia, President; J. D. Griffith, M. D., of Kansas City; G. A. Goben, M. D., of Kirksville; Geo. Homan, M. D., of St. Louis, Secretary, and Albert Merrell, M. D., also of St. Louis.

Mr. James B. Prather, of Maryville, was unavoidably absent.

The terms of Drs. Griffith, Merrell and Homan expired July 2, 1887; they were reappointed in February, 1888, by Gov. Morehouse, but the appointments were not confirmed by the Senate at the late session, so that successors for these members, as well as for the late Dr. Cox, will have to be appointed by Gov. Francis.

The minutes of the January meeting were read; on motion, their approval was deferred to the following day, when after some amendment they were adopted.

The following report of the Secretary was read, duly considered and adopted:

I have the honor to submit the following report for the period embraced by the first six months of the present year:

Public Health.—The failure of the General Assembly to grant the legislation desired and requested at the beginning of the recent session, the draft of a bill for which purpose was endorsed at the meeting of the local health officials, held in St. Louis last December, and recommended by the Board for passage, and which legislation is absolutely essential to the thorough sanitary organization of the state by counties and towns, has continued the Board in its anomalous and embarrassing position of being held responsible for the prevention and suppression of dangerous epidemics, while no means of effective local co-operation has been provided by the law.

The lack of duly organized local help would be a serious drawback to effective work by the Board in any event, as bodies of this kind, hastily improvised in the face of danger, are usually inexperienced, and oftentimes at a loss to know what to do; but when this almost universal want of preparation throughout the State is considered in connection with the fact that the Board has been steadily denied any funds to extend aid or to do any work in time of peril from disease, the untoward possibilities of this lack of sanitary providence may be better understood and appreciated.

This unfortunate condition of affairs was seen during last winter and spring, in the alarm, inconvenience, losses and distress experienced in various parts of the state from outbreaks of small-pox, all, or nearly all, of which could have been avoided if there had been in timely existence, trained officers, or organizations, fitted by knowledge to deal promptly and properly with occurrences of this kind.

It is to be hoped that another legislature will consider the subject of State organization for public health ends, in the light its importance demands, and make suitable provision therefor in order that Missouri may stand on the same high plane in sanitary affairs as that now occupied by so many of its neighbors.

A noteworthy illustration of the progress that has been made during the last few years in co-operative work between states for the protection of public health, is had in the quarantine conference, which was convened by the Governor of Alabama, at Mongomery, early last March, the special object being to devise, consider and adopt measures for the prevention of yellow fever the present summer in the Southern States. The joint and mutual agreement to that end, reached by the participating states, has been carried out with assurances that the country will be spared a repetition of the pestilential occurrences of last year in Florida.

At the instance of Governor Francis, and by request of the Board of Directors of the Merchants' Exchange, of St. Louis, I attended the conference as the representative of this board and state, and upon my return, made a report thereon to the Governor and Exchange, a copy of which is herewith submitted for your information.

An important matter that very closely concerns the public health is the transportation, by common carriers, of the bodies of persons dead of communicable diseases, and it is gratifying to be able to state that this subject has received the attention of the general baggage agents of the principal railway lines in this country at their annual meeting, and blank forms and regulations have been prepared for a uniformed system of safeguards in this respect in the interest of the protection from disease of railway employes and the public as well.

I submit, for your consideration and approval, such forms of this kind as have been sent to me for that purpose.

Medical Practice.—During the first six months of the present year, certificates based upon diplomas of recognized schools, have been issued to 252 physicians, and similarly, licences have been granted to 16 midwives, a total issued of 278.

During the four years, ended on the 2nd instant, that I have served in my present position, 1,141 licenses have been granted to graduated physicians, and 154 to midwives, a total of 1,295.

This source of revenue, small and uncertain as it is, has been the only financial income accruing to the Board, by means of which the necessary expenses of conducting its business could be met for the three and one-half years, ending December 31, 1888. All the additional outlay not covered by this insignificant source has been supplied by the members.

The meagre and insufficient appropriations for the Board made by the General Assembly, at the late session, afford no reasonable hope that this body will be able to do its appointed work in a proper manner during the next 18 months, and in accordance with the just expectation of the public and demands of progress and intelligence.

What shall be undertaken in this direction under existing circumstances is a subject for consideration and determination by the Board.

A considerable number of cases arising under the "Practice Act" upon application for registration, await your hearing and decision, a majority of them being instances where I have declined to assume the responsibility of granting license, and referred the applicants to the Board for a hearing as provided by law.

The duty and powers of a State Board of Health, charged with the execution of laws relating to medical practice, have been made additionally clear by a decision of the Supreme Court of the United States, rendered the present year, in a case appealed to that tribunal from West Virginia, a copy of which I herewith submit.

The decision is of greater interest to us by reason of the fact that the Medical Practice Act of West Virginia is almost identical with that of Missouri.

The decision in question sustains the view held by this Board, that the regulation of medical practice falls within the police power of a state, and that boards constituted for the purpose of enforcing laws to that end have the right to exact evidence satisfactory to them, not only as to the sufficiency of an applicant's medical qualifications, but to guard the people against the consequences of deception and fraud on the part of practitioners of medicine.

In several of our neighboring States, having State Boards of Health, action has been officially taken notifying medical schools that after the session of 1890 91, the diplomas of no college will be recognized that does not require as a condition of graduation a medical course of four years with attendance at three regular courses of lectures; a school failing such requirements to be held as not being in good standing under the law.

The question of the advisability of this board taking some action looking in the same direction is respectfully submitted for your consideration.

A considerable number of applications for registration by non-graduated practitioners, exempt under the law, have been declined under the option of the Board and in accordance with the rule to govern such cases adopted four years ago.

In several instances fraudulent diplomas have been presented and false affidavits made. These cases have been uniformly referred to the prosecuting attorney of the county from which the application was made.

There has been a considerable degree of activity shown in enforcing the practice act in different parts of the state during the last six months; in several instances this is being undertaken by local medical societies, acting in the interest of decency and honest dealing toward the public by practitioners, both licensed and unlicensed, with the geneaal effect of purifying the professional atmosphere to some extent, educating public opinion in favor of the law and discouraging resort to unprofessional or dishonorable conduct in practice.

A number of applicants have made known their wish to appear for examination before the Board. Due notice has been sent to these as to the time and place of the meeting, with the blank forms of application required to be filled in and presented in such cases.

Inasmuch as it appears from information receieved from the Secretary of State that no changes were made in the laws relating to public health and medical practice during the late session of the Legislature, there seems no necessity apparent for any radical departure from the course pursued by the board, beneficially, it is believed, during the last four years.

So far as I have been able to learn, no provision has been made, or steps taken, looking to the publication of the annual report of 1888. The demands for such publication are frequent, copies are due to other States which send their official publications regularly to this office, and some means should be devised to secure as early as possible, the appearance of the report in printed form.

The recent death of Dr. G. M. Cox creates a vacancy in the Board, and deprives the homeopathic school of present representation in this organization. Dr. Cox was the senior member of the Board in point of service, and, to the extent thecondition of his health permitted, was an active and efficient member.

The hearing of the cases of three physicians of St. Joseph, applicants for registration, whose certificates were withheld pending a hearing on charges of unprofessional or dishonorable conduct in publishing advertisements tending to mislead and deceive the public, occupied the greater part of the Thursday session, all of the accused being present and being represented by legal counsel.

The final decision reached was that the license be issued to one, while the others, being found guilty as charged, were refused certificates.

A large number of other cases arising under the Medical Practice Act was submitted, considered and variously disposed of.

The general coudition of public health in the State was discussed and appropriate action taken.

The schedule of shipping forms, rules, etc., to regulate the transportation of bodies of persons dead of communicable diseases proposed for adoption by the National Association of General Baggage Agents was submitted and formally approved.

It was decided that the law did not warrant the recognition of licenses issued to practitioners by County Examining Boards, in other States, as a basis for granting certificates.

The matter of requiring of medical schools the adoption of three full term courses as a condition of graduation, in substantial uniformity with the course resolved upon in neighboring States, was laid over for consideration and action by the new Board.

In the matter of the application for registration of several graduates of a newly organized school in this State, it was decided to withhold license until satisfactory evidence was received that the requirements of the Board had been fully observed and enforced.

The following resolution was offered by Dr. Merrell, and after discussion, referred to a committee for consideration and report at the next meeting.

Resolved.—That the following be added as Paragraph VIII, to the Schedule of Requirements adopted by this Board, as a basis for its recognition of the good standing of a medical college in its administration of the Practice Act:

VIII. Evidence of Standing.—As evidence of its standing the college shall file with the Board, for its information, a certificate of reputability from and under seal of the National Association of the branch of medical practice to which the college professes to belong.

After the transaction of routine business the Board adjourned sine die.

MEDICAL ITEMS.

Female Hospital.—Drs. Taylor, Schleiffarth and Murphy have been appointed Assistant Physicians at the Female Hospital.

Hypodermic Injection of Blood in Anemia.—Westphalen reports the cure of a case of extreme anemia by the hypodermic injection into the thighs of defibrinated blood.

Can Pneumonia be Cut Short by Antipyrin?—nsl nswer to this self-posed question, Dr. Beyer, in the *Med. News.* details the history of two cases of beginnning pneumonia in which the happy effect of antipyrin led him to believe in the possibility of such a thing.

Picrotoxine as an Antidote to Morphine.—Prof. Arpad Bokai (Orvosi hetalap.) calls attention to the fact that picrotoxine in exciting a paralyzed respiratory center and in preventing the lowering of the blood-tension by excitation of the vaso-motor center of the cord, opposes the toxic action of morphine.

Death from a Man's Bite.—At East Saginaw, recently, two men became involved in a fight, during which, one was bitten on the thumb. Later on, gangrene set in, and spread rapidly, death resulting in a few days. This must have been an instance of where the saliva is rendered virulently poisonous by the influence of anger.

Sullivan—Kilrain:—An interesting fact connected with the "late unpleasantness" was that Muldoon, the trainer of Sullivan, estimated that the probable loss of weight to the champion through transpiration and evaporation would be about seven pounds; on weighing him directly afterward, it was found that he had lost just six and one-half pounds.

An Innovation.—The *Evening World*, of New York, has started a subscription fund for the purpose of paying for medical attention for sick children of the poor of that city. This is an innovation that is as surprising as it is laudable. The idea of paying for medical services of this kind is almost unique, at this day of clinics and free dispensaries at every corner.

The Futility of Experiments with Drugs on Animals.—Edward Berdoe, M. R. C. S., Eng., L. R. C. P., Edin., has taken the pains to write a book with the above title; the *Brit. Med. Jour.* characterizes it as being thoroughly weak and unable to support the side of the question on which prejudice and sentiment, and not scientific reasoning, seem to have placed the author.

Successful Tendon Grafting.—Mr. Mayo Robinson presented a patient, not long since, to the London Clinical Society, who at that time was able to move the fingers and pronate and supinate a hand that had been divested of all the muscular and tendinous structures on its dorsal aspect. Wishing to preserve the arm, if possible, Mr. Robinson had taken a piece of tendon hanging from the hand (which was also lacerated) four inches and a half in length, and stitched it to the extensor muscle and to the remaining fragment of the extensor tendon.

Pyrodine.—The physiological action of this drug has been studied by Dreschfeld, of Manchester. He reports that it is a powerful antipyretic, lowering the temperature rapidly, its effect lasting for hours at a time. Taken without objection from patients, it provokes sweating without the depression incident to the use of many such drugs. Its effect is particulary favorable in scarlet fever, pneumonia, typhus and typhoid fevers. It is also an anti-neuralgic of considerable value.

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Lawson Tait's Queer Mistake.—In the *Lancet*, of June 29, Lawson Tait records a case in which he opened the abdomen by median incision, below the umbilicus, for the purpose of removing a large parovarian cyst. On drawing off the contents, he found it to consist of yellowish gluey-looking bile, and further investigation showed that the supposed parovarian cyst was really an enormously distended gall-bladder, holding over eleven pints of fluid. The cause was found to be a calculus impacted in the duct. Mr. Tait stitched the severed bladder-wall to the abdominal wound near the pubis, draining by means of a tube; eventually the fistula healed. The author strongly prefers cholecystotomy to cholecystotomy.

A Second Edition of The Siamise Twins.—From Wabash, Indiana, is reported the birth of female twins inseparably connected at the hips and lower part of the abdomen. There is a head for each of the two bodies, and enough legs to go around; these protrude from each side of the body where the trunks are connected at the hips. The spinal column is continuous throughout, but no other vital organs are connected. Each child breathes, pulsates, and is nourished independently of the other. Both have free use of their respective limbs.

Their joint weight is 12 pounds, and they are plump and hearty.

The event, of course, has caused much commotion in the locality, and the proud mother is compelled to keep open house all the time to receive the numerous callers.

The Uncertainty of Electricity in the Destruction of Life.—Apropos to the question of the feasibility of employing electricity in the execution of criminals, the following incident may be related:

In New York city, a Newfoundland dog, weighing 63 pounds, ran afoul of an electric light wire, fortified with enough electricity to supply 124 burners. The dog fell at 3 P. M., and remained apparently dead—in

fact, was pronounced dead, by a veterinary surgeon—until after midnight, when a slight movement of his body gave the mourners hope that all was not yet over. Nevertheless, all that night and the next day he lay almost lifeless, but on the following day, he revived and is now able to get around, a weaker but a wiser dog.

ABDOMINAL SECTION IN ACUTE PERITONITIS.—Much welcome encouragement is contained in the report of the following case furnished the British Medical Association by Mr. Vincent Jackson: A young man was suffering from acute peritonitis, with stercoraceous vomiting. Abdominal section was performed and a large quantity of offensive, purulent fluid evacuated. The vermiform appendix and cecum were examined with a negative result, and the interior of the abdomen having been well cleansed by flushing with warm water, a glass drainage tube was inserted and the remaining portion of the incised walls was brought together by a few points of interrupted silk suture. Recovery was uninterrupted.

THE PRINCE OF WALES contributed one hundred guineas to the fund which the Lord Mayor of London is raising in aid of the Pasteur Institute in Paris and for the assistance of English patients seeking its services.

The Prince also shows symptoms of philanthropy in another way: He has taken the leadership of a movement which has for its end the honoring of the memory of Father Damien, the martyr priest of Molokai. This project includes a memorial in the lazar island, the leper-habitation, as well as a ward to be maintained at one of the London hospitals, to encourage the study of leprosy.

Such an outbreak of liberality on the part of Queen Vic's family is almost unprecedented.

CORRESPONDENCE.

SULPHONAL.

WA-KEENEY, KAN., July 12, 1889.

EDITOR REVIEW.—I desire to call the attention of the profession to an unlooked for result, following the administration of sulphonal. Although it did not result in any thing serious, I don't think it will do any harm to report it.

About one o'clock on the morning of June 30, I was called to attend Mrs. C., æt. 20 years, in her first confinement. She was a woman of vigorous constitution, never having been sick inher life. Although I had but five blocks to walk, the child was born when I reached the house. Having cared for the child and removed the after-birth, the patient appearing exceedingly nervous and irritable; I administered a fifteen-grain dose of sulphonal and fifteen minutes later went home. Twenty-five minutes after reaching home, I was again hastily summoned by the patient's husband. I repaired to the house at once, and found her with a face as white as a sheet. Radial pulse not perceptible. Respiration eight to the minute. She was bathed in a cold, clammy sweat and gave every indication of a dangerous collapse. I immediately examined her for hemorrhage, but found none. She rallied in about an hour, under the persistent use of stimulants and hot applications, and has since done very well.

Has any one noticed a similar case?

M. H. FARMER, M. D.

A NEW SUSPENSION METHOD.

CARROLLTON, ILL., July 17, 1889.

EDITOR REVIEW.—I wish to suggest to the profession to try stretching the spinal column, in cases of spinal affection, with the patient in the horizontal position. He could be placed on his back, side or face, on a lounge, bench or the floor, the feet being fastened to the foot of the lounge or to one wall of the room. The apparatus recommended by Dr. Shaw might be applied to the head and armpits, and extension made by either the pulleys or a windlass with a rag wheel, the counter extending apparatus being attached to the wall by a screw-hook.

It seems to me that this method would be worth trying in very weak or very corpulent patients.

I have not had an opportunity to try it, but hope it may be serviceable to medical gentlemen who may have suitable cases.

J. T. CROW, M. D.

SOCIETY NEWS.

MEDICO-LEGAL SOCIETY.

The recent session of the International Congress of Medical Jurisprudence was successful beyond the most sanguine expectations of its promoters. It perfected a permanent organization and provided for the selection of an additional Vice-President from each State and Territory of the American Union, and from each foreign province, state and country which had members in the organization that took an interest in the success of the movement.

Future meetings were authorized to be called by the Executive Officers, a list of whom is presented below.

All the papers read at this Congress, with a record of its transactions and the proceedings at the banquet will fill a large volume, the expense of which is estimated at about $700. The Executive Officers were authorized to elect additional members into the organization, the only expense of which is the enrolling fee of $3.00 which entitles the member to the Bulletin free.

It is asked that all interested medical gentlemen unite in this movement with a view of making it International,

and that each one suggest a suitable name for Vice-President from his state, territory, province or country. If this effort is received with favor by the members of the Medico-Legal Society, active, corresponding, and honorary alone, without counting others, it will at once provide for the publication of the transactions and the papers read before the Congress, and lay on firm and sure foundations the International work of promoting the advancement of Medical Jurisprudence, not alone within the United States of America, but throughout the civilized world.

The officers elected by the Congress, held June 4th to 7th, 1889, in New York, were as follows:

PRESIDENT.—Clark Bell, Esq., New York.

VICE-PRESIDENTS.

Chief Justice Sir John C. Allen, New Brunswick.
Chief Justice Edward F. Bermudez, Louisiana.
Dr. Bettincourt Rodrigues, Portugal.
Gov. Biggs, Delaware.
Dr. Daniel Clark, Toronto, Canada.
Ex-Chief Justice Noah Davis, New York.
Dr. Edward J. Doering, Illinois.
Prof. John J. Elwell, Ohio.
Judge W. H. Francis, Dakota Territory.
Dr. W. W. Godding, Washington, D.C.
Dr. Eugene Grissom, North Carolina.
Dr. Carl H. Horsch, New Hampshire.
Judge Locke E. Houston, Mississippi.
Dr. Charles A. Hughes, Missouri.
Dr. W. W. Ireland, Scotland.
Prof. Robt. C. Kedzie, Michigan.
Dr. Norman Kerr, England.
Dr. Jules Morel, Belgium.
Dr. Jennie McCowen, Iowa.
Dr. Connolly Norman, Ireland.
Prof. John J. Reese, Pennsylvania.
Judge H. M. Somerville, Alabama.
David Stewart, Esq., Maryland.
Theo. H. Tyndale, Esq,, Massachusetts.

SECRETARY.—Moritz Ellinger, Esq., New York.

ASSISTANT SECRETARIES.

Frank H. Ingram, M.D., New York.
Wm. J. Lewis, M.D., Connecticut.
J. F. Walters, New York.

The President was empowered and directed by the Congress to appoint additional Vice-Presidents for the various states, territories, provinces and countries, which will be done during the summer vacation. Members of the Congress observing this notice, who have not sent their enrolling fee, will please do so.

Communications may be addressed to CLARK BELL, President, 57 Broadway, N. Y., or MORITZ ELLINGER, Surrogate's Office, New York City.

BOOK REVIEWS.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS. Vol. 3, No. 1, July, 1889.

CANCER AND CANCEROUS DISEASES. By Sir Spencer Wells, Bart., F.R.C.S.

This monograph presents the second of the course of annual lectures on this subject established by John Thomas Morton, of England, in 1887, the first being delivered by Sir James Paget. After signifying his appreciation of the terrible nature of this disease, with which we are so often called upon to combat, the author deplores the fact that notwithstanding our wonderful progress in the various branches, both of medicine and surgery; notwithstanding our growing ability to prevent disease in one direction, to control or diminish its spread in others and stamp it in still others, this apalling scourge, cancer, is actually on the increase.

In discussing the subject of the origin or causation of cancer, he rather unceremoniously dismisses the probability of its being of a microbic nature. He supports this view by reciting a communication from Virchow to himself, in which the great pathologist expresses his belief that "the most scrutinizing investigations have not yet arrived at a convincing demonstration" of the specificity of Scheurlen's cancer bacillus. In view of the recent reports of successful inoculations of cancer from animal to animal, by Hanau, Hahn and von Bergmann, this part of the monograph appears to be rather behind hand, when it asserts that, up to date, no one has succeeded in accomplishing this feat.

The author pays more attention to the practical aspect of the subject, however, and considers at greater length the question of the surgeon's duty when he is called upon to remove such a tumor; shall the cancer alone be removed, or shall the whole of that part of the organ from which it grows be included? The views of the advocates of both sides of the question are given, the author himself inclining to the more radical method, when the breast is the organ implicated; in cancer of the cervix uteri, no general rule can be formulated; each case must be determined by the extent of involvement, etc.

Notwithstanding the eminence of its author, and the prestige his name carries with it, there is little that is new or interesting in this monograph.

CARDIAC DYSPNEA AND CARDIAC ASTHMA. By Dr. S. von Basch.

The purpose of this brochure is made known in these words of the author: "A clinical picture that is not satisfied with describing a symptom, with pointing to the anatomical disturbances in the organs that are involved, but also attempts to afford an explanation of the biological processes that take part, may not be content with the general explanations and connections hitherto offered. It must embrace all the considerations that may

serve to clear up and widen our views concerning the biological processes. It is in this way alone that the diagnosis, *i. e.*, our recognition of a pathological condition, can correspond to the present status of medical science, which is built up by clinical, anatomical, and physiological experiences."

Physiological dyspnea first receives the author's attention; it is defined and considered in a manner that serves to give a better understanding of the processes that bring about the pathological respiratory difficulty. The experiments which Dr. von Basch himself conducted clearly refute many of the older ideas and theories regarding the mode of production of dyspnea, when arising from heart lesions, and lend much to the interest attached to the work.

An analytical tabulated record of cases closes the monograph.

THE INFLUENCE OF MENSTRUATION AND OF PATHOLOGICAL CONDITIONS OF THE UTERUS ON CUTANEOUS DISEASES. By Dr. L. Grellety, Consulting Physician at Vichy; Silver Medalist of the Academy; Secretary of the Therapeutical Society, etc.

In introducing this work, the author says: "During the fifteen years in which I have practiced at Vichy, I have frequently been struck by the evident sympathy which exists between the utero-ovarian, and tegumentary systems. This is a subject little known and little investigated. It has seemed to me that it would be of some interest to condense within a few pages my personal observations, and notes which I have been able to collect in various authorities."

After studying the influence of menstruation and the relation between uterine and cutaneous pathology, the etiology and therapy are discussed in a manner that will no doubt often prove of opportune service to the profession. There are probably few of us that have not wished for a lucid explanation of the cause of unsightly pimples that frequently abound on the otherwise fair cheek of a young lady just arrived at womanhood—especially when the physician's prompt suggestion of digestive disturbances as an excitant is refuted with some dignity by the subject.

This and other questions of an analogous nature are elucidated by Dr. Grellety.

TENSION IN SURGICAL PRACTICE; INFLAMMATION OF BONE; CRANIAL AND INTRA-CRANIAL INJURIES. By Thomas Bryant, F.R.C.S.; M.CH. (HON.) Roy. Univ. I. Vice-President and Member of the Court Examiners of the Royal College of Surgeons; Consulting Surgeon to Guy's Hospital; Member of the Surgical Society of Paris.

Although of late years, in the lecture room, much has been said about tension and its importance in surgery, it is a noteworthy fact, that medical literature contains but little on the subject; hence the present monograph, comprising three lectures delivered by Mr. Bryant before the Royal College of Surgeons, is timely, to say the least.

Tension is described and analyzed as met with in new growths, in hemorrhage, as the result of inflammation, and as it is seen in wounds, from which the author is led to some interesting and practical conclusions which he gives in summary.

His second lecture is upon the Effects of Tension, as illustrated in inflammation of bone and its treatment, and the third, on Cranial and Intracranial Injuries, not unnaturally follows the previous lectures, and presents considerations upon a subject which is neither sufficiently recognized nor generally taught. The whole series comprises one of the most valuable works included in the "monographs," and should be of great interest, not only to surgeons, but to practitioners generally.

ANTISEPSIS AND ITS RELATION TO BACTERIOLOGY. By Dr. J. Neurdorfer, Royal Staff Physician and Director of the General Poliklinik, Vienna.

In this monograph, the author invites the attention of the profession to his expose of the present state and future aspect of the antiseptic question in the following well chosen words: "Even as travelers on the deep, wide ocean take no account of the quiet, steady motion of the vessel, and notice it only when they reach their haven, and even as, further, they know not the direction of the point they have left nor of that to which they are tending—this knowledge being posessed by the officers and steersman alone, from consultation of the charts and compass—even so does the practitioner make his way along the broad ocean of his daily life and occupation. Owing to his anxious and difficult daily task, his attention may not be directed to the slow, but continuous progress in his science; he only sees the change of scene after it has shifted, when he is conscious of the alteration of the theory, method and practice of another. On this new basis he may stand for a decennium, until progress has again effected an alteration in the beliefs of medical science. He, however, who lives only in the past and looks not to the future, cannot have a complete understanding of the past. His thoughts and hands work empirically and by routine, and this is incompatible with quick alteration, and in so far progress is checked. It is advisable then to stop occasionally in order to consider the course of events in the past and the probability for the future."

If anyone should have a doubt at the present day as to the importance of antisepsis and bacteriology, the simple knowledge that inflammation and fever, the products of bacterial forms, have been the cardinal symptoms of most diseases since the year 1800, should dispel any such illusion.

Those who, for any reason, have not closely followed the progress of antiseptic science, will find in this well-

written book, all the information necessary to a complete understanding of our present knowledge of the subject.

BOOKS AND PAMPHLETS RECEIVED.

Swedish Movement and Massage Treatment. By Prof. Hartwig Nissen, Director of the Swedish Health Institute, Washington, D.C.; Late Instructor in Physical Culture and Gymnastics at the John Hopkins' University, Baltimore, Md.; Author of "Health by Exercise without Apparatus." F. A. Davis, 1889. Price, $1.00.

Suspension in the Treatment of Affections of the Spinal Cord. By Alexander B. Shaw, M.D., Professor of Diseases of the Mind and Nervous System and Electro-Therapeutics, Beaumont Medical College; Consulting Neurologist, St. Louis Insane Asylum, Alexian Brothers Hospital, St. Louis Railroad Hospital, etc.

Experiments on Green versus Dry Storage of Fodder, Bulletin, No. 7.

Experiments on Feeding Ensilage against Dry Fodder, Bulletin, No. 8. Missouri Agricultural College Experiment Station, P. Schweitzer, in charge, Columbia, Mo.

Digestive Ferments; A Consideration of their Nature, Action, Quality, Dosage and Incompatibilities, with Notes of Clinical Cases. Compiled by the Scientific Department of Parke, Davis & Co., 1889.

Transactions of the Southern Surgical and Gynecological Association. Vol. I, Session of 1888, Birmingham, Dec. 4 to 6. Caldwell Printing Co., 1889.

Forty-Ninth Annual Catalogue and Announcement of the Missouri Medical College, St. Louis.

Forty-Eeighth Annual Announcement of the St. Louis Medical College, St. Louis.

Fifteenth Annual Announcement of the Medical Department, University of Tennessee, Nashville Medical College, Nashville, Tenn.

Ice in the Sick Room.—A saucerful of shaved ice may be preserved for twenty-four hours with the thermometer in the room at 90° F., if the following precautions are observed: Put the saucer containing the ice in a soup plate and cover it with another. Place the soup plates thus arranged on a good, heavy pillow, and cover it with another pillow, pressing the pillows so that the plates are completely embedded in them. An old jack-plane set deep is a most excellent thing with which to shave ice. It should be turned bottom upward, and the ice shoved backward and forward over the cutter.—*Sanitarian.*

SELECTIONS.

WHERE TO GO FOR A CHANGE OF AIR.

In pursuance of the subject of health resorts, it may be opportune to remind our readers of the principles which should guide us in the choice of sanatoria for cases of definite disease. It need hardly be pointed out how desirable it is that in our instructions to our patients we should not content ourselves with the vague recommendation of "change of air," but be able to say with some approach to precision what kind of change is required, and where it may be obtained. Few things are more disappointing to a patient than to leave the comforts of home and incur the inconvenience of travel and change of residence without obtaining any substantial advantage to health. Worse is the case of the patient who gets mischief and not benefit by the change, and who is compelled to admit with Touchstone that "when he was at home he was in a better place." A knowledge of the therapeutic uses of sanatoria on the part of the practitioner will go far to avert such disappointments as these.

When dealing with the question of change of air for a given case of disease, the choice commonly lies between the seaside, the mountains and inland resorts of low or moderate elevation. It will help our decision if we remember that the two former are more or less stimulating and bracing, while the last varies in its effect according to position and local conditions, and may not be bracing at all. Thus, if a patient be in a condition to require stimulation, we shall, as a rule, be right in selecting either a marine resort or an inland resort of tolerable elevation. If the case, on the other hand, requires soothing conditions, we shall look for them on the plains or in the valleys, and preferably where there is a large amount of local shelter. A typical case which so often comes under notice is that of a patient convalescing from a fever or other acute disease. We would deprecate the early or hasty sending of such cases from home from a regard both for the patient's interests and those of the public, but a time often comes when a change is indispensable. If the condition remaining be one of pure debility, without fever or much irritability, a marine resort may be recommended with confidence. If, however, there be some lingering pyrexia, with much nervous disturbance, the sea and the mountains will probably both be found too stimulating, and an inland resort, will best serve the interests of the patient. If the case has been one of pneumonia or acute bronchitis, and all that remains is some cough and debility, some of the milder and more sheltered marine resorts will be found of advantage.

Certain constitutional conditions are an indication for the selection of the seaside, especially diseases of the glands. Early phthisis often does well at marine resorts, but the sea voyage, when obtainable, is much more efficient. Children as a rule do well at the seaside, and exhibit much delight in it. Certain conditions, on the

other hand, are an indication for avoiding the sea—such conditions, namely, as eczema, hepatic disturbance and acute insomnia. It is worthy of note that, while proximity to the sea usually gives sound sleep to the healthy, it often provokes insomnia in the ailing. It may sometimes be impossible to say with confidence beforehand whether the patient is in a fit state to bear with advantage the stimulating effects of sea air. In such cases a few days' trial will make the indications clear. If the effect of the sea is to cause headache, insomnia and dyspepsia, we may be sure that it is doing harm, and that unless amendment speedily sets in a change inland is to recommended.

The mountains are to be chosen in cases of breakdown from mental over-work or over-worry, if there be no marked irritability present. Slight insomnia is often speedily overcome at elevated resorts, but if this troublesome symptom be severe theLowlands will be found preferable.

The revived interest in the English spas is a gratifying feature of the last few years, and the progress made has been exceedingly satisfactory. Bath is now one of the best appointed resorts in the world, and may advantageously obtain the patronage of many sufferers from rheumatism, rheumatoid arthritis and gout, who formerly went further afield to Aix-la Chapelle, Vichy and Aix-les-Bains. Harrogate has few rivals in Europe in the strength and variety of its waters. The brine baths of Droitwich are unsurpassed, while Leamington, Woodhall and Moffat offer great attractions.

Our resorts have one serious defect as compared with their foreign rivals and competitors—they are too dull. In the art of amusement we are badly beaten by the French, Germans and Austrians, who spare no pains to interest and attract visitors by all that can please the eye and charm the ear. The best music in Europe is to heard at Karlsbad; and Homburg, Vichy and Baden-Baden offer a combination of attractions which no British resort can rival.—Ed. *Lancet.*

CREOLIN.

This new antiseptic, it is asserted, is obtained from a peculiar kind of coal which is selected with great care; the carbolic acid and benzole are distilled off, and the residue is treated with resin and caustic soda. It does not contain a trace of carbolic acid, but is asserted by Esmarch to be more active than that substance against pure cultivations of non-spore bearing organizations, but less powerful in its action on putrefying substances. It is recommended for its non toxic action. It exists as a dark brown syrupy liquid.

Dr. Max Kortum gives the following method of using creolin: Solutions have at first a milky appearance, but if allowed to stand for any considerable time become brownish, owing to the resinous principles and naphthaline salts separating out. For surgical purposes two solutions are employed—a 2 % solution and a ½ % solution. The stronger one is used for disinfecting the hands, the instruments and the surface of the patient's body. This has no undesirable effect on the skin or on the instruments. The weak solution is employed for irrigating wounds, for saturating tampons, and for moistening dressings, etc.

Creolin has a decided hemostatic action, and yet even in strong solutions does not act as a caustic. It may, if very strong, cause smarting, but only temporarily.

In a case where a pulmonary cavity communicated with the cavity of the pleura which had been opened for empyema, copious hemorrhage occurring some days after the operation from the lung cavity, a plug soaked in a 2 % solution of creolin was inserted and stopped the hemorrhage at once, the only unpleasant effect produced being that the sputa tasted of creolin. In cases of large burns and bed sores, permanent baths of creolin water have proved very successful. In the case of bed sores, Dr. Max Kortum suspends the part affected in a pan containing a 5 per mille solution.

In midwifery cases the vagina may be washed out with the ½% solution, both before and after delivery. Where the perineum is ruptured this solution has an excellent effect when used to moisten compresses kept applied to the part. In the case of atony of the uterus post partum, a plug soaked in a 2% solution proved very successful.

Surgical dressings, gauze and moss applications can be moistened every day or two with the creolin solution. In addition to watery solutions, creolin may be prescribed combined with oil or cerate, or as powder with boracic acid as a basis. Cotton wool is also impregnated with it.

The 5% may be used for itch or pediculi. In gonorrhea injections of a watery solution of from 1 to 5 per 1000 are very effectual, and in vesical catarrh a 1 per 1000 solution may be injected with advantage. Both in this affection and in gonorrhea creolin may also be given internally in pills containing from 1 to 4 grains each, three or four times a day.

Among others who have used creolin to advantage we may mention : 1. Frohmer; skin diseases, bronchitis, etc.; as an antiseptic a 3% solution was used; it was also given internally in doses of 15 to 30 minims of the 1 % solution. 2. Neudorfer speaks very highly of creolin in erysipelas, wounds, etc. 3. Jefsner; cystitis in a woman, bladder washed out with a ½ of 1% solution. 4. Hiller; meteorism, flatulence, gastric dilatation and catarrh; also for irrigating the rectum in carcinoma cases, 1 5000 solution. 5. Klamann uses a 1% creolin oil as a dressing. 6. Margaritti; purulent ophthalmia; instilled and applied on compress (1-400); gonorrhea, irrigations of 5 to 8%. 7. Purtscher; conjunctivitis, all the varieties of ulcerative keratitis, etc.; 3 to 4 drops of the 1% solution several times a day. 8. Eisenberg recommends it in the place of cor. sub., carbolic or iodoform. 9. Spath used a creolin gauze and emulsion; it stimulates the growth of granulations. 10.

Sirena and Allessi; 1 to 4 drops of a 3% solution added to 90 drops of a broth culture, prevent the growth of comma bacillus of cholera; solutions of creolin must be freshly prepared when wanted. 11. Rausche; harmless; does not stain instruments like cor. sub. 12. Baumm; uterine and vaginal injections; puerperal diseases; cracks and excoriations of the nipples heal better under cor. sub. solutions.

A stronger than a 2% solution of creolin produces a violent burning if applied to mucous membrane or very sensitive epidermis. Elastic catheters are acted on by creolin in the same way as by carbolic acid.—*Med. Abstract.*

MISHAPS FROM THE USE OF THE ASPIRATOR.

Accidents following the use of the aspirating needle are not common, still cases do occur and sometimes result fatally. Dr. J. M. Ball (*New York Medical Record*, March 9, 1889) relates a case in which "the needle of an aspirator was plunged past the right pleural cavity, through the diaphragm, and into the liver, with fatal results." The case came before the courts, and at a second trial the doctor was fined $50 damages. The patient was a strong, robust and healthly man æt. 38 years, a farmer. He contracted a severe cold. When the doctor was called in, he found marked dulness over the right side of the chest, extending downward from about one inch above the nipple. The chest was aspirated in the right axillary line, between the sixth and seventh ribs. The needle was first introduced about an inch, and then finding no fluid, it was plunged deeper. The aspiration was performed on Thursday, and immediately after the breathing became rapid and difficult, and there was great pain in the right hypochondriac region; in twenty-four hours patient was delirious and his abdomen tympanitic and swollen; on the following Tuesday he died. The post-mortem showed that the thoracic organs were healthy, except the lower lobe of the right lung, which was the seat of hepatization. The abdomen showed evidences of acute general peritonitis. The superior surface of the liver presented a wound about one-eigth to three-tenths of an inch in depth. Between the superior surface of the liver and the under surface of the diaphragm, and adherent by plastic exudation to the latter, were several flattened clots of blood each about the size of a half dollar. The diaphragm, at a point corresponding to the wound in the liver, presented evidences of intense inflammation. The length of the needle used was 3⅛ inches.

This is a remarkable case and one which is very instructive. The abdomen and liver itself is not infrequently explored by the aspirating needle without any ill results following. In this case there was slight hemorrhage no doubt, and the upper surface of the liver was wounded, but it seems to me that if the needle had been perfectly aseptic a fatal result would not have ensued. This is a point which, however, was not touched upon in the trial — several questions were asked the experts about the parts that could be wounded by a needle passed through the sixth or seventh spaces on the right side.

In the *Lancet* of February 2 and 9, 1889, a case is reported where general subcutaneous emphysema followed aspiration of the chest. This case occurred in the Victoria Hospital for Children, and was under the care of Dr. Evans. The lungs had cleared, except at the right base, where there was presistent dulness with tubular breathing. Thinking that perhaps there was a localized empyema, a full-sized aspirating needle was introduced just below the angle of the scapula, but no fluid was obtained. The needle was withdrawn and the punctue closed with wool and collodion, Two hours later there was subcutaneous emphysema extending from the seat of puncture, over the trunk, and up the right side of the face; in six to eight hours the swelling had involved the whole trunk and scrotum and formed a prominent collar around the neck, the eyelids were puffy, and the right eye closed. After twenty-four hours the swelling began to subside, but it was nearly a fortnight before all the swelling had disappeared. For the first three days the temperature was as high as 102°. The child died some time after of diphtheria, and at the site of the puncture the pleural sac was obliterated. The lung was firmly adherent to the chest wall, and contained a dilated bronchi. The needle had probably entered one of these dilated tubes. —*Montreal Med. Jour.*

THE TREATMENT OF ACNE WITHOUT ARSENIC, SULPHUR, OINTMENTS, OR LOTIONS.

At a meeting of the Medical Society of the County of New York, held April 22, 1889, Dr. Geo. H. Fox read a paper with the above title (*Medical Record*, May 4, 1889). He said it might be inferred from the title of his paper that he objected to the use of arsenic, sulphur, ointments, or lotions in the treatment of acne, but such was not the truth. These time-honored remedies were doubtless valuable, yet their usefulness was limited, and their routine employment was what he objected to. Some cases of acne could be cured by local treatment alone, but the majority of cases demanded general treatment; that is, the treatment of the patient, and not merely of the patient's skin. In the general treatment the administration of medicines might sometimes play an important part, but the profession had yet to learn that diet and hygienic rules were worth more than all the drugs of the Pharmacopeia. From the stand-point of the therapeutist the best division of acne was into the irritable and the indolent forms of the disease. The practical value of such a division has long been appreciated in the treatment of ulcers. The irritable form was largely reflex in origin, and was greatly affected by disturbances in the alimen-

tary tract and of menstruation. The skin was usually fine and soft, quickly inflamed by stimulating applications, and the use of the watch-key, with which to press out the comedones, was apt to raise red spots. Local treatment in these cases, except of the most soothing character, was contra indicated; general treatment was most efficacious. In the indolent form the vascular excitability just mentioned was comparatively slight, while the granular obstruction was the most important feature. The skin was likely to be coarse and doughy, often greasy. The accumulation of the foreign bodies in the skin led to the formation of the papules and pustules, and in strumous patients to abscesses. In these cases the glands should be evacuated; the skin, in other words, thoroughly cleansed. Soap and ointments did not answer.

Bearing in mind that the irritable form required general treatment, and the indolent form local treatment, it would be found that in the former physicians relied more upon arsenic than upon any other remedy; but he thought that if arsenic were banished from the globe the average physician would be far more successful in the treatment of acneous affection. Sulphide of calcium had been recommended by some authorities, but he thought it was liable to lead one using it to neglect more important measures. Ergot possessed value which was not generally recognized. Its chief benefit was seen in indolent acne, and he had come to regard Dr. Denbow's explanation of its action as nearer correct than that which he had formerly offered. In the local treatment of irritable acne he had tried many remedies, but would simply say that at present he seldom found occasion for their use. The treatment of acne in general, which he had found of greatest benefit, was neither new nor original; it consisted in diet and local massage. Diet struck at the root of the disease. Local massage could be made with the fingers or instruments adapted to the purpose. Its object was twofold, to empty the glands and to cause the disappearance of the inflamed lesion. It required to be persisted in. Among the instruments to be used he now felt like apologizing for his former criticism of the circular curette. Trial had proved its value, and the redness which it left would disappear in due time. No fixed plan of treatment of acne would apply to all patients.—*Therapeutic Gazette.*

THE CAUSES OF APPARENT DEATH.—To the lay mind the state known as catalepsy is probably oftenest thought of as the cause of apparent death; and most of the old-wives' tales about burying people alive are connected with a history of a trance or cataleptic state. As a matter of fact, however, catalepsy is extremely rare, and a cataleptic state in anywise simulating death is rarer still.

M. Brouardel, in a recent discourse (*Gazette des Hopitaux*, No. 55, 1889), has gone over most of the various causes which practically do sometimes cause conditions simulating real death. First among these naturally comes the condition of asphyxia, so often met with in the new-born. Here life may apparently be extinct for one, two, three, or even four hours. It is claimed that the heart may cease to beat for a time and yet that life may be restored. We must hold it very doubtful, however, whether the heart ever renews its action after it has once entirely ceased.

Hysterical patients sometimes pass into a state of trance or catalepsy, in which there is a very great lowering of all the vital functions—a kind of human hibernation. But these patients always show some signs of vitality to even a superficial examination.

Sudden heart failure with syncope, from various causes, is held to be the most frequent cause of simulated death. Brouardel cites the case of an individual who had been condemned to death, and who was hung by the neck for twenty-five minutes. He was taken down, carried to a dissecting room, where an hour later, on opening his thorax, his heart was found to be beating. Hoffman reports another case of this kind.

In the algid stages of cholera and some other infectious fevers a condition resembling death sometimes occurs. It has been shown that certain infections develop ptomaines which have a powerful anesthetic influence upon the organism.

Exposure to excessive cold produces a drowsiness, and finally a coma, which resembles death, and which, in fact, usually ends fatally. So, too, immersion in water may apparently extinguish life. Yet resuscitation occasionally occurs, even after more than an hour. M. Sestier reports seventeen cases of "fulguration," or strokes by lightning, in which the patients remained in a state of apparent death for a long time. In the same way violent falls, concussions, blows, and gunshot wounds may, by causing cerebral concussion, apparently, as well as really, extinguish life.

Partial and non fatal asphyxiation may be caused by being buried in the earth. It is claimed that in certain cases individuals have been buried for two or three days and still restored to life, but doubtless the earth was light above them.

Carbonic oxide, alcohol, and anesthetics all may produce respiratory and partial heart-failure, with apparent death. M. Laborde has reported the case of a drunkard who was so poisoned by alcohol that the temperature sank to 76° F. in the rectum, and Bourneville cites a similar case. Both persons recovered.

The tests for death in all these cases are well-known, and most of them easily applied. To the eye of the physician the physiognomy is generally enough. The entire and continuous cessation of respiration, of the heart-beat, and of the blood-flow is usually sufficient to confirm the physician in his opinion of the case.—Ed. *Med. Rec.*

THE PRESENT ASPECT OF THE IODOFORM QUESTION.

—The triumphant march of the germ theory received some four years ago an unexpected and, it seemed at that time, a final check. Just when it seemed to have been surely determined that unhealthy action in wounds was caused directly by the entrance of diseased germs from without, and that the exclusion and destruction of germs would secure rapid and normal repair, the startling discovery was made that iodoform, which was widely used as an antiseptic, and which evidently promoted greatly the healthfulness and healing of wounds, was not a germicide, and might in fact be the vehicle in which germs were carried into the wound. In an article in the *Annals of Surgery*, March, 1889, Dr. Van Arsdale discusses the matter fully, showing what interesting discoveries have resulted from the refusal of iodoform to fit into the old theory, and giving the literature of the subject. Investigation has proved that diseased germs are aided in their septic work by certain chemical substances called ptomaines which are formed in the tissues as a result of their action upon the tissues. Iodoform, while it does not destroy nor seriously hinder the germs; does destroy the ptomaines. Thus, we may suppose, the tissues, not being enfeebled by the action of the ptomaines, are enfeebled either to destroy the germs or to resist their malign assaults. Clinically, certain facts have been developed which are of practical value, whatever may be the fate of the scientific theories involved. In dressing wounds the surgeon must hereafter use two different sets of antiseptics. He must first seek, as far as possible, to exclude disease germs or to render them inactive, and for this purpose he must use germicides, such as corrosive sublimate. He must next endeavor, by applying agents like iodoform, to prevent the formation of poisonous chemical substances in the wound, or to decompose them and render them inactive if once they have formed. These latter agents, if they, like iodoform, contain disease germs, must be disinfected before they are applied. Iodoform should be washed in corrosive sublimate solution. It should be brought into as intimate contact as possible with the surface of the wound, and after its application the wound should be covered with germicide and protective dressings.—*Med. Rec.*

The Microbe of Eclampsia in Women.—Dr. Emile Blanc has been for two years investigating this subject at the Lyons Obstetrical Clinic under the direction of Prof. Fochier, and now publishes the results in the *Lyon Medicale.*

Toward the end of 1887, he found in the urine of an eclamptic patient in the Charité a peculiar microbe which he regarded as a micrococcus. He cultivated this microbe in bouillon and inoculated a rabbit under the meninges; it died in convulsions more marked on one side than the other. He inoculated another rabbit in the auricular vein and produced infectious nephritis.

On February 21, 1889, a woman eight months pregnant took a convulsion while being examined previous to admission into hospital, and one hour afterward took another. In the interval between the attacks the urine was drawn off with careful antiseptic precautions, and two tubes of gelatine charged after Esmarch's method. White-bluish colonies of microbes soon developed, which did not liquify the gelatine. These microbes proved to be fine bacilli, with a dark spot in the center resembling a nucleus, and capable of active movement.

Cultivations were made in gelatine, agar agar, potato and bouillon. The bouillon culture was used for a series of experiments on thirteen rabbits, a dog, a bitch, a pregnant guinea-pig and a rat. In the first series of experiments he inoculated the auricular vein of a rabbit eight days pregnant; convulsions began in one hour and proved rapidly fatal. Another rabbit inoculated with a very small dose of the same bouillon developed localized inflammatory edema, followed later by gangrene and some slight constitutional symptoms. In a second series of experiments, non-gravid rabbits inoculated with a somewhat stronger dose developed the same phenomena. Two dogs were inoculated, and in an hour convulsive spasms of the trunk began, returning every seven or eight seconds and persisting through a whole night. Another rabbit pregnant three weeks was then inoculated; in an hour it aborted and died in general convulsions. Those rabbits which resisted the first inoculation bore afterward the infection of larger and stronger doses without general or local symptoms of any consequence.

In a third series of experiments a pregnant guinea-pig was inoculated first in the peritoneum; for a day or two grave constitutional symptoms ap ared, but it recovered. It was then inoculated in the jugular vein; severe dyspnea soon began and the animal grew worse. It was finally killed when *in extremis.* The autopsy showed or found anatomical changes; inoculation of the blood and urine reproduced the characteristic microbe. In another experiment upon a rabbit the urine was carefully examined; at first it was loaded with albumen and full of leucocytes and casts, then became scanty and finally suppressed, and, post-mortem, intense renal congestion was found with alteration of the epithelium. Different fluids (blood, urine, etc.) from the animals which died after inoculation readily produced the characteristic microbe in culture fluids, and when inoculated in other animals gave rise to the same symptoms and reproduced the same microbes.

Prof. Fochier has always insisted that eclampsia is not a distinct disease, but a form of uremia. In the light of these experiments, it is worthy of consideration whether the nephritis which so commonly proceds or accompanies eclampsia may not after all be an infectious condition due to the presence of microbes.—*Montreal Med. Jour.*

Hypertrophy of the Tonsils and Its Treatment.—In a lecture delivered in Edinburgh recently, Sir Morell

Mackenzie said that chronic tonsillitis or hypertrophy of the tonsils proceeds from two causes. A large number result from a low form of inflammation in childhood. When the tonsils obstruct the breathing, portions should be removed, also if the enlargement be associated with frequent attacks of inflammation. There is another condition which requires a similar proceeding; when the follicles of the tonsil are much enlarged the affection cannot be cured except by taking off a section. Dr. Mackenzie uses a tonsillotome which is a modification of Physick's. As a general rule, lightness of touch is the chief desideratum in operating, but in tonsillotomy it is the reverse. Heaviness of touch is the important thing. The tonsillotome must be pressed well over the tonsil, which is also to be projected into it by pressure with the thumb placed under the jaw. It is most important to take off enough. Dr. Mackenzie says hemorrhage in this operation is rare, but it has occurred; the carotid in some instances has had to be tied. He advises in hemorrhage the use of two parts of tannic acid and one part of gallic in a little water. The patient should be given twoteaspoonfuls, and sip them slowly. The bleeding stops almost at once. The patient must be told to swallow the liquid; not gargle. Application with a brush will do no good. He should swallow the fluid slowly, and must on no account wash out his mouth with a gargle. The advantage of the addition of gallic acid is that it prevents the tannic acid from dissolving.—*Condensed from Edinburgh Medical Journal.*

Freezing of the Surface in Neuralgia.—In a recent brochure, M.D. Debove, of the Hospital Andral, gives his experience with the therapeutic use of the chloride of methyl as a freezing agent in various diseases. He believes that the freezing acts somewhan after the manner of a counter-irritant. According to his experience if the whole surface of the skin supplied by the sciatic nerve be very rapiely and superficially frozen, the results are almost miraculous, even in the most inveterate cases' the pain and the loss of power in the affected limb disappearing. In moft instancrs repeated freezings are necessary for a complete cure; but usually after three, four or five applications a very pronounced effect is noted, even in the worst cases. In using the chloride of methyl it is essentsal that the territory frozen be widespread and that the freezing be but momentary, since a persistent and very energetic freezing is liable to be followed by vesication or even sloughing. The effort is to act simply upon the surface of the skin. In females according to the experience of Debove, vesications is especially easily provoked. Diabetes and albuminuria is considered by our author as contraindications to the use of the method.

M. Debova has also employed freezing in cases of facial neuralgia. and affirms that he has obtained a cure even in some cases in which the nerve had previously been cut by the surgeon, but in which, after four or five months, the pain had come back. In these cases it is often necessary that the freezing be performed daily for a long time even for three months or more. Pigmentation of the skin is not rarely produced in sciatica, but the discoloration is asserted not to appear upon the face.

In Philadelphia, at least, freezing of the surface is not a new treatment in cases of rebellious neuralgia, as we have known the successful treatment of such cases in this manner. The first publication of the method, however, appears to remain with Debove, as he communicated his results af long ago as August, 1884, to one of the Parisian medical societies.—*Ther. Gaz.*

Phenacetin, while it is quite as powerful as methozin and acetanilid, does not cause the pain in the stomach, nor the scarlatinaform rash of the former; nor does it give rise to the cyanosis of the latter. However prolonged may be its administration, and Dujardin-Beaumetz has given it for months, in doses of one to two grains per diem, there have never been observed bad effects. He has used it in every form of pain (neuralgiæ, migraine, rheumatic pains, muscular rheumatism, the lightning pains of tabes, etc.) with the best results. Further, in cases of hysteria, and of hysterical or neuratoxic pains, phenacetin has seemed to produce better effects than bromide. It calms the excitability of the nervous system, and in some obstinate cases of nervous insomnia it procured sleep. Phenacetin seems not only an analgesic but a hypnotic.

I have tried phenacetin (para-acet phenetidin) in ten cases of migraine. Of these three were epileptiform, arising from coarse brain disease (tumors, cerebral abscesses, etc.). Here the drug, given in five-grain doses four times daily, had excellent effects as regards the pain. The migraine was, however, replaced by fits of temper (the patients were children).

In the other cases there were temporarily beneficial effects. In two of these cases (the patients had a neurotic ancestry) a scarlatinaform rash made its appearance twice on the use of five grain doses. It disquamated rapidly, and was noticed only after the first two doses. In trifacial neuralgia phenacetin was often of value, when supplemented by constitutional treatment, where diabetic conditions were present. Constitutional treatment without the phenacetin did not give good results.

In a few cases of insomnia, resulting from simple exhaustion, phenacetin in ten-grain doses proved to be a valuable hypnotic. It failed in the excited states of mania and melancholia. In a few cases of agitated dementia there was a temporary beneficial hypnotic effect. The fulgurant pains of locomotor ataxia were temporarily relieved. In two cases of fever cyanosis and excessive sweating were observed to result from five-grain doses.

In my judgment the scarlatinaform rash, cyanosis and excessive sweating must result in predisposed cases

from any hypnotic or antipyretic which exercises its action through the nervous system. To be efficient drugs must exercise powerful action on certain centers, and in defective nervous systems these drugs must produce effects which take the line of the least resistance. —*Medical Bulletin.*

Some Abuses of Etherization.—In a paper on this subject in the New York *Medical Record*, February 23, 1889, Dr. George F. Shrady recommends the following precautions in order to avoid many of the abuses of anesthesia :

1. In commencing the administration of ether the gradual method is to be preferred.

2. Its employment allows the lungs to empty themselves of residual air, prevents coughing and struggling, and places the organs in the best possible condition to receive and rapidly utilize the ether vapor.

3. After the stage of primary anesthesia is reached, the more pure ether vapor the patient breathes the better.

4. The shorter the time of anesthesia, and the smaller the amount of ether used, the less likely are the unpleasant sequelæ to occur.

5. The more evenly it is administered the less shock to the patient.

6. Anesthesia should be entrusted to experienced administrators only.

7. Many of the fashionable efforts to resuscitate patients are not only useless but harmful.

8. The minimum amount of force should be employed to restrain the muscular movements of the patient.

9. Mixed narcosis is often advisable for prolonged operations.

10. The utility of the galvanic battery, in threatened death, is to be proven.

11. The most trustworthy means of resuscitating desperate cases are artificial respiration, hypodermic stimulation, inhalation of nitrite of amyl, and inversion of the body.—*Med. and Surg. Rep.*

The Promotion of Illegitimacy in Vienna.—In connection with the obstetrical department of the hospital, and in the hope that the system would prevent induced abortions among the lower classes, the following plan was adopted some years ago:

Any woman can enter the hospital, masked or not, as she desires; be known only by a number; live according to one of the three grades—the cheapest costing about thirty cents a day; be attended in labor by skilled accouchers, and leave the hospital when she desires, with or without the child. If without the child, it is given a number, by which the mother can reclaim it even after years. When not reclaimed, the child, if a boy, is brought up as a soldier; if a girl, as a nurse. The only condition required of the mother is the payment of the small living fee (thirty cents a day), and enclosing her name and address of friends in an envelope to the secretary of the hospital, which is only opened in the event of her death while in the hospital. If all goes well, on her departure from the hospital it is returned to her unopened. This plan has indeed decreased the abortions and increased the population of Vienna, but it has also removed another check on free intercourse—the fear of becoming pregnant.—*Medical Record.*

On the Preparation of Subcutaneous Injections of Quinine.—Benermann has been recently experimenting to obtain the formula of a solution of quinine, which, when injected subcutaneously, will not cause pain, and provoke no local reaction.

He obtains a neutral salt by dissolving twenty parts of muriate of quinine in one part of pure hydrochloric acid, and fifteen parts of pure water. The solution is filtered, and each syringeful contains nine grains of quinine chloride. Benermann has made upward of an hundred hypodermic injections with the solution without producing pain or any local irritation whatever. He has seen the temperature of typhoid patients fall, and the pain of neuralgia and rheumatism abate under these injections, which, he says, are not followed by the unpleasant symptoms often attending the administration of quinine by the mouth.—*Boston Med. and Surg. Jour.*

Medical Statistics. — According to a recent census the proportion of physicians to each 100,000 inhabitants is as follows : United States, 122 ; Germany, 70 ; England, 66 ; Belgium, 54 ; France, 29.—*Texas Courier-Record.*

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service.

June 10 to July 13, 1889.

Fessenden, C. S. D., Surgeon, to proceed to Cairo, Ill., on special duty, July 8, 1889.

Long, W. H., Surgeon, granted leave of absence for twenty-eight days, June 18, 1889.

Austin, H. W., Surgeon, to proceed to Cairo, Ill., on special duty, July 8, 1889.

Irwin, Fairfax, Surgeon, granted leave of absence for ten days, July 6, 1889.

Mead, F. W., Passed Ass't. Surgeon, granted leave of absence for thirty days, June 24, 1889.

Magruder, G. M., Assistant Surgeon, relieved from duty at Baltimore, Md., to report to the Supervising Surgeon General for duty as Acting Chief Clerk and Attending Surgeon, July 10, 1889.

Goodwin, H. T., Assistant Surgeon, granted leave of absence for thirty days, July 8, 1889.

ORIGINAL ARTICLES.

THE MEDICAL PROFESSION, FAITH-CURE, CHRISTIAN SCIENCE AND MIND-CURE.

BY ALEXANDER B. SHAW, M. D., ST. LOUIS, MO.

Read before the Meeting of the Missouri State Medical Association at Springfield, Mo., May 22, 1889.

GENTLEMEN: The existence of Faith-Cure, Christian Science, and Mind-Cure is due to a co-working of imagination, credulity and superstition, and failure of our profession to properly appreciate and manage the psychical condition of its clientele, shrouded in the dim obscurity of the remote past. The date of origin of Faith-Cure is *ultra hominum memorium*.

Fear, out of which springs one of the first laws of nature—self-protection—directly leads to the wearing of amulets, charms, phylacteries and talismanic carvings, and it was but one short step from faith in these things to protect one from harm, to a belief in, to our minds, equally nonsensical procedures for the relief of the sick and afflicted, such for instance as the use that was made of the old Syrian temple called "Abracadabra." It being held that to pronounce this name a given number of times, or to say

A b r a c a d a b r a
b r a c a d a b r a
r a c a d a b r a
a c a d a b r a
c a d a b r a
a d a b r a
d a b r a
a b r a
b r a
r a
a

or to wear a scapula or protection-pillow containing these words, arranged in a triangle as above, would restore one from many afflictions.

Among the things of which we of the nineteenth century boast not a little, is our disenthralment from the weighty fetters of superstition; but, gentlemen, with all due deference, permit me to say, that, notwithstanding your intelligent ancestry, derived from a strong-minded and liberal race of freemen; notwithstanding your association from childhood with those who claimed to be "not at all superstitious;" notwithstanding your exact and liberal education; notwithstanding the fact that you have probably conscientiously asserted time and again that you were not in the minutest degree superstitious, permit me to suggest that there is not one within the sound of my voice that is not more or less afraid to be one of the thirteen at the table, or of crossing a funeral procession, or of beginning a work of importance on Friday, or of moving on Saturday, or that would not rather wait until Monday to begin a journey, or would not prefer to find a pin lying with its head toward him, or would not seriously object to allowing a snake he was attempting to kill to escape for fear some enemy might get the better of him; or is not startled by a dog howling near his house, or by the breaking of a looking-glass, or worried by a dream that he has had, or by the spilling of salt, or something of like character. And why? Oh, just because.

Voodooism is the natural result of this same awe-inspiring superstition.

Man is so constituted that not only does familiarity breed contempt, but mystery begets respect.

If what I have said of members of our profession be true, how much more grossly superstitious must the laity be?

All down the corridors of time, viewed with the telescope of history and the microscope of the enlightenment of this era, we read inscriptions that are only deciphered by the spelling of the magic word "superstition."

Faith Cure, Christian Science and Mind-Cure trade on the faculty of the mind called imagination, and the natural tendencies of many maladies to recovery.

The demand is created by the imagination, and as long as the profession fails to recognize this demand and supply its actual necessities, it will seek and find a supply in Faith-Cure, Christian Science and Mind-Cure, or some other such tissue of fiction which fancy hath woven.

It is an undoubted fact that no system of charlatinism has ever flourished, which has not reported, and reported truthfully, thousands of recoveries under its ministrations, however injurious or harmless its modes of treatment, however at variance their doctrines, however ridiculous their tenets, however insufficient their therapeutics. All which have run the course inseparable from systems of impostures, have unquestionally published to the world recoveries from grave disorders, which no man who consents to draw the scales of prejudice from his eyes can gainsay.

Toward the close of the last century a physician named Perkins, who resided in Connecticut, made a most wonderful, startling and momentous discovery. (Extract from address by T. Gaillard Thomsen):

He discovered that certain metallic substances, when applied to the animal body and passed along it like the poles of a battery, had the glorious power of draining out diseases, very much as a magnet would draw a needle from your pocket. In accordance with this knowledge he constructed two metallic stems, about three inches long, blunt at one extremity and pointed at the other, one being composed apparently of brass and the other of steel, though this is not certain, as in a moment of moral obliquity, doubtless, the discoverer obtained a patent and kept them secret.

No sooner was that great discovery of Dr. Perkins made known than the trumpet of fame spread its repu-

tation with lightning speed to the uttermost parts of the earth. Certificates asserting most excellent cures from the highest dignitaries of the land, from judges and generals, from leading merchants, from ladies eminent for charity, and I need not say, great nnmbers of endorsements from eminent divines, poured in like a paper flood. Dr. Benjamin Douglass Perkins went to London so as to give England an opportunity of benefitting by the great invention, and soon it was discovered that what would draw out diseases from an American would likewise act upon an Englishman, for great cures soon occurred and the land of our forefathers applauded to the echo this great boon. Other countries of Europe experienced the influence of the reform, and especially did it meet with success in Denmark. Large numbers of cures were published daily, swellings visibly went down, pains were removed as if by magic as the tractors were passed, tumors disappeared, the lame walked, the blind saw and miracles seemed about to be revived. Dr. Worthington Hooker, of New Haven, a townsman of Dr. Perkins, declares that he has now in his library a volume of 200 printed pages containing the records of great numbers of undoubted cures.

Meanwhile Dr. Perkins sold thousands of tractors at five guineas a pair, and even medical men used and endorsed them. The nobility of England, anxious to benefit the poor by disseminating the great blessing, seized upon it with avidity and at once established a large infirmary.

This was founded with all the pomp and circumstance which characterize inaugurations by our trans-Atlantic brethren, and was under the patronage of the first men of the land.

Lord Rivers was President of the Board of Governors, and a long list of titled names followed his, as vice-presidents.

In all this the ladies were most enthusiastic. In what great work are they not foremost?

In March, 1802, the number of cases computed as effected by the tractors amounted to one million, five hundred thousand. Well was Dr. Perkins sustained in the language with which he closes his report: "It is believed that no medical remedy yet discovered has been supported by so many well authenticated and important cures performed in so short a time."

In spite of all the evidence adduced, there were sceptics in the land (but, alas! gentlemen, where do we not find sceptics?), who declared that all this was the effect of the imagination, and one, Dr. Haggarth, making a pair of tractors of wood, which he painted to resemble those of Perkins, really did produce the same results, curious as it may appear. But these sceptics were soon put to confusion and "Perkinism" as the discovery was called, marched in triumph through the world, and the "Perkinson Institute," under the skillful management of the philanthropic Lord Rivers and the noble vice-presidents, became a blessing to suffering humanity.

All this occurred and was fully reported in 1802. We now live 87 years later. Where now are Perkinson ism and the Perkinson Institute and Perkins' tractors? History is silent, and when you ask society, it hangs its head and blushes slightly at its own credulity.

Do you doubt that recoveries occurred under this system? I do not for a moment; for how could Lord Rivers and the titled vice-presidents and the judges and the clergymen, and the host of others who gave certificates, and the noble ladies doing in the cause of humanity, all have been deluded? They were not deluded, gentlemen; they merely called recoveries cures; that was all.

In this paper I do not refer to systems of charlatany for the purpose of railing at, or inveighing against, them, but to cite the fact that the sick, although organic changes have occurred in some instances, do frequently recover in the hands of pretenders, because of the natural tendency in many ailments toward recovery, and the influence of the mind upon the body, stimulated by the imagination.

The Faith-Cure of to-day in all of its varieties is but the equivalent of the witchcraft of bygone ages, and its continuance is to a considerable extent due to a failure on the part of the profession to consider it of sufficient moment to demand its serious consideration in the way of the study and appropriate treatment of certain psychical states not truly hysterical, often, however, so classed, dependent on a regnant idea, or the undue preponderance of the faculty of automatic, sometimes wholly unconscious, imitation, or the result of what is now so generally called neutrasthenia, in which condition one is quickly tired in brain and body, easily perturbed, oversensitive, emotional and timid—a state which may be either inherited or acquired by misuse of alcohol, tobacco, tea or coffee, excessive mental exertion or bodily fatigue, terror, serious impairment of the general tone of health, or lesser causes, when acting conjointly with some mental or physical peculiarities, or to functional disturbances due to emotional states—a condition closely akin to the faculty which every one possesses, to a greater or less degree, of mentally influencing or disturbing the functions of the body, giving rise at times to sensations and functional derangements so closely resembling typical classical diseases which they mimic so closely as to mislead the best diagnosticians.

The grand discoveries in the realm of pathology, not omitting special mention of the results of bacteriological research, have given such an irresistible impulse to the teachings of those who hold that all disease has a physical basis, that there is no such condition as functional disorder without primarily such a substratum, that the *mens medicorum* has been carried on this tidal wave of the glorious results of the patient, laborious, scientific inquiry, experiment and investigation; so rapidly of late, toward and near to the full fruition of the fondest hopes of the most enthusiastic materialist in pathology, if I may use such an expression to indicate those who repudiate the idea of there being primarily a purely functional disorder, that medical men even of the highest attainment are misled by the allurement of

the possibility of discovering a physical cause for every ailment and this cause a bacterial germ, and a germicide to remove the cause, and we, as physicians, have failed for many years to pay sufficient attention to what may be aptly called psychical disorders of the body, or psychical conditions, engendering functional derangements, or functional disturbances, produced by psychical states, by reason of molecular nutritional, not cellular, but which eventually determine "cellular alterations," discoverable by the microscopist. (And now it is that bacteria frequently come to the front. The equilibrium between death and repair, the harmony of health, has been destroyed. The *vis medicatrix naturae* having been temporarily worsted, the bacteria gain the ascendency, having found a nidus peculiarly adapted to their growth and propagation).

Every one will readily admit that certain bodily ailments are productive at times of physical conditions that are of such importance, and characterized by such individuality, as to merit a separate place in our nosological classifications. It is equally certain that disease or excessive functioning of a part or organ *i. e.*, deficient or excessive inervation of a part or organ, will result in a pathological process, and faulty inervation is equally prone to produce disease.

Coincident with the march of civilization has occurred an increase of intellectuality of man; increased intellectuality is irrevocably coupled with greater mobility and impressibility of the nervous system, which is equivalent to greater responsiveness to perturbing influences. This predisposition to perturbation called the "diathesis spasmodica," is becoming more prominent as a factor in disease, not only etiologically and nosologically, but also pathologically; and as neglect to properly consider and meet what is called the malarial strain, that tinctures, or influences many of the diseased conditions presented in the Mississippi Valley, is so frequently followed by failure to relieve, so will neglect to recognize and promptly care for this ever-increasing psychic element in the diseased state occurring in the nineteenth century, result in lack of success in proportion to our negligence.

This increased mentality also creates greater inquisitiveness as to the cause of disturbed function that expresses itself in the familiar question: "Doctor, what is the matter?" and, as well, a desire to know whether the medicine will accomplish the desired end. And another question is now almost as frequently propounded, "Doctor, how will this medicine act?"

As a rule, attempts to explain pathological processes and the *modus operandi* of treatment beyond the comprehension of the laity, result in incorrect impressions, false deductions, absurd expectations, fallacious hopes and the opinion that the doctor does not know as much as he thought he did. If failure follows, the conclusion is reached that either the doctor or the medicine is worthless. Loss of faith in doctors drives the patient to seek help from some other source, and that of which least is known is frequently the one chosen.

Now what is the remedy?

1. A thorough appreciation of the fact that the mental state frequently induces disordered function of the body.

2. That such functional derangements may, and frequently do, result in structural changes.

3. That diseases may be mimicked unconsciouslybecause of, (a) automatic imitation; (b) regnant idea; (c) expectant attention; (d) inherited or acquired psychic state, neurasthenia as well as hysteria.

4. That the psychic condition requires special treatment as much as does the resultant functional or structural derangement.

5. That we should refrain from sharing our pessimistic views as to the result of treatment with our patients of this class, particularly.

6. That we should cease dividing our knowledge of disease and its cure with the laity.

7. That when interrogated by our patients as to what drugs we are using and what dose we are administering, and the *modus operandi* of action of the same, we should courteously, yet positively, indicate that we are posing as practitioners and not as teachers of the healing art. That our services as physicians are at their disposal, but that we have neither the time nor the inclination to make half way doctors of them.

8. To conceive and to do the proper thing for our patients, regardless of what they may consider appropriate, is the essence of skill. A placebo is often better medicine than a physic, for the cases that are relieved by Faith-Cure at all.

9. Be less servile in our demeanor.

10. Strive to merit, then demand, the respect, and we will secure the confidence of our patients.

MIND MOVES MATTER.

THE CHEMICO-PHYSIOLOGY OF NERVE FORCE AND ITS RELATION TO THE PATHOLOGY OF THE NERVES.

BY JAMES C. SULLIVAN, M.D., CAIRO, ILL.

Read at the Fifteenth Annual Meeting of the Southern Illinois Medical Association,

That oxygen is not oxygen, in its literal sense, we find evidence in the fact that the basic oxides are alkalies and combine with acids to form salts. We find the mon-oxides strongly basic; the peroxides neutral, while only those possessing the maximum of oxygen are typically and strongly acid. We know that by passing an electric spark through a tube containing dry oxygen, it is reduced in volume with resulting ozone, and that recently it has been separated into ozone, its electro-negative and antozone, its electro-positive properties, these two combining to form ordinary oxygen and thus demonstrating it to be composed of two atoms. It has been sufficiently demonstrated that the ozone is its oxidizing property and as ozone supports neither life nor combustion, it naturally follows that the antozone is its car-

bonizing and life-sustaining principle; and further that oxidation and combustion are physically and chemically two distinct and separate processes. The belief that while hydrogen is monatomic in its nascent state, but when existing separately it is in a state of double atoms, is daily gaining ground and is evidenced in the hydrocarbons forming alcohol radicles; and that one of these atoms may be replaced, is evidenced in the formation of hydrochloric acid. From an analysis of the generation of hydrogen either by electricity or by chemical action; from the expansibility of superheated steam whose identity is changed into one volume of oxygen and two volumes of hydrogen, and, according to Avogadro, the volume is doubled when heated to 273° C., or expands one-two hundred and seventy-third of its volume for every degree of heat above the melting point of ice; and as expansion is the accumulation of particles of the same kind of matter or the intra-molecular aggression of atoms of a foreign substance, and the fact of such accumulated or occluded matter in the superheated steam, all serve to show that added atoms of a foreign substance, termed caloric, have entered and separated these elements. In the synthesis of water, the union of oxygen and hydrogen by the aid of this same caloric principle is attended with explosion, light and the great evolution of heat and force, as well as water in the form of vapor, showing both a decomposition of the molecules and union of the atoms. By this, the antozone and one-half the hydrogen unite to produce the light, heat and force, while the ozone and remaining atoms of hydrogen simultaneously unite to form the vapor, which afterward condenses in fine drops of dew. This also serves to demonstrate that all matter is not hydrogen, as Prof. Lockyer says, but is rather the result of a union of the atoms of ozone, antozone and hydrogen in definite proportions, to become the origin of all matter and force. That these caloric particles are carbon, is evidenced in the great calorific intensity of the hydrogen flame, which, besides carbon, produces water also, as in its synthesis (hence its name). Further evidence of this is given by the hydro-electric machine, whose positive to the negative property may be reversed by the simple insertion of a small quantity of oil or turpentine into the escape tubes; and from the fact that steam may be decomposed by both carbon and electricity alike; also from the fact that electricity may be produced from heat, as with the thermo-electric pile, and from the fact that no matter what peculiar property or degree one form of electricity may have from another, they are all identical, each having all the properties of the other. Since heat, electricity and force are convertible, they must be identical,and inasmuch as they occupy space,they must be matter, and that matter, carbon, in its atomic state, which is all force from the sun's rays to that of the amoeba.

In the inhalation of oxygen, that this antozone is the part absorbed by the blood and carried into the circulation, is demonstrated by the well known fact that many easily oxidized substances, such as pyrogallic acid, pass largely through the living body without being oxidized. Showing under what slightly changed conditions the ordinary oxygen may be separated into ozone and antozone, we know that hydric peroxide is found in water when ozone is produced from phosphorus, and that Messner, in 1863, found it in rainwater, the result of a thunder-storm. Later, when this is carried to the brain by the circulation, meeting with its elements rich in carbon, hydrogen and phosphorus unite, and by cell explosion, produce this carbon kinetic, which is both animal life and heat—the *vis nervosa.* Both protagon and lecithin seem to be very conspicuous components of all the nerves and brain tissues, and are abundantly stored in the ganglionic cells of the gray matter.

All force is from center to periphery, and every act or even thought, according to Baron Liebig, requires an equivalent of nerve waste, and as these ganglionic cells are nucleated vesicles largely supplied with blood (the more especially those connected with the pia mater and the vascular colums of Clarke in the cord), consequently they alone are capable by fissiparous multiplication of supplying waste; and, as is well known, excitation of a sensory nerve produces increased activity of the capillary circulation in the part in which the nerve originates and when it is severe and long continued, it produces vascular congestion, and, if in the cord and medulla, it results in tetanus, or when modified the so called transferred irritation is the result. These conditions, and the very presence of recurrent nerves and fibers, indicate that that which we term reflex action is not a stimulus transmitted to the brain, but rather the peripheral waste of a sensory nerve-cell, and motion is the result of a ganglionic cell supply of the same by the explosion and formation of carbon kinetic, which, by the cerebrin of the axis cylinder is carried to their terminal loops, there meeting with the intra-molecular oxygen of the tissue or muscle with which it unites with the production of contraction, heat, sound and carbon dioxide. Right here is the cradle of ptomaines, leucomaines (malarial) and those toxic extractive matters similar to those described by Gautier as originating in the intestines; he asserts that the living organism may poison itself by the accumulation within itself of those substances. Thus by the healthy performance of even their trophic functions, is disease produced when these substances are not eliminated from the system.

This idea is further endorsed by Prof. Semmola,who, in the last International Medical Congress, remarked that "the part played by bacteria in pathology is the production of certain noxious and decomposing elements of the blood, which substances, and not the bacteria, are the potent factors in the causation of disease." If the heart be viewed, not simply as a hollow muscle but also as the chief ganglion of vegetative life, working under the influence of the vaso-motor system of nerves, we discover that counter-balance so necessary to the equipoise of all force and to the production of that co-ordination of movements and mutual relations of the vascular factors by which we live, act, suffer. Nor will

this seem so paradoxical when we remember that it is surrounded by a membrane distinctly similar to the dura-mater that envelopes the brain; that its muscular structure differs from all others of the body in the tenuity of its sarcolemma, and the fibers, which by their anastomosis, present some analogy to the pia mater; and in its nervous and ganglionic arrangements it furnishes a decided physiological, though not anatomical, resemblance to the pacinian corpuscles, but more so to Savis' description of the electrical organs of the ray. Its endocardium, while lining the entire cavity, is especially dense and thick on the left auricle, and on the septum and auricular appendage of the right auricle. It is covered with an extremely delicate epithelium consisting of the two forms characteristic of all the blood vessels. All the elements of nutrition are contained within the blood from which the antozone finds its way into the ganglia of the sinus venosus by absorption through the epithelium, (it is a well known fact to all pathologists that there is nothing more conducive to the fatty degeneration of the heart than the presence of improperly oxigenated blood), or it may enter by permeating the tissue, as described by Foster in speaking of the "washed-out heart," and serve as a stimulus to the deeper or more external ganglia, sufficient to render it automatic in its action and to be simply inhibited by the vagi. Testimony to this is lent in the analysis of the cardiac and trophic neuroses. Many diseases, though obscure, when their cause is sought in the central nervous system, are found to point to the heart as their center, as is instanced in chorea in which, when the heart itself is free from pathological lesions, the brain and spinal cord are either anemic or hyperemic with edema as a result of the dilatation of the vessels, thus showing a vaso motor failure. Many drugs, in being cardiac stimulants or depressants, show by their action and influence on the vaso-motor system, that the heart still retains its mesoblastic identity, if not independence of, the central nervous system, to which it is connected by its sympathetic branches, and with whose fibers embraced in calm repose they sleep in trance, or with Graeco-Roman hold they wrestle in epilepsy. The heart is the first organ in the fetus that performs its functions, as, according to Prevost and Liebert, its pulsations commence before any cavity can be observed in the mass of embryonic cells of which it first consists, and its contractions, before the development of any tissues distinctly muscular. As all metaphysicians have agreed that the soul forms the body, and not the body the soul, it must be here then that it first finds its seat, when forming intimate connections through the sympathetic with the pneumogastric, cerebrum, cerebellum, spinal accessory, and cord, where, like a discreet general, surrounded by his staff of will, memory and understanding, he may manipulate from a secure and accessible position every physical impulse, without being exposed to the resulting battle and destruction of the cells in the gray matter, whose molecular identity could afford shelter but for the short space of one pulsation. Not that any "pent up Utica confines its powers," for the soul and body being one, each whole in the whole, and whole in each part, distributing its energies locally in correspondence with special structure, and hence being invisible from the entire body. Though this may be of little practical importance, still it may serve to impress the mind of the christian physician that it is murder to procure abortion even at the first day. As with each fetal pulsation, force is first made manifest and carries with it the elements that cell by cell form the tiny fiber whose spinal shape shows the direction in which that force was spent in forming the spiral-shaped figure of-eight muscular fiber, described by Lower.. The recent researches of Prof. E. Fisher of Strassburg, show that this spiral growth becomes apparent in the fecundated ovum after the third segmentation, and that even the protoplasm in each individual cell is arranged in a spiral form. Our own E. C. Spitzka, of New York, describes lines of formative force in the recently fecundated ovum in the double astar of the paternal and maternal pronucleus, even before they unite to form the nucleated monerula. This figure-of-eight is plainly demonstrated by the lines of force in the magnetic field of the bar-magnet, and is most probably the true course of both nerve and muscle-currents which is not divided at the equator, as DuBois Raymond would have us believe, but is the self same continuous current, becoming peripheral as the neutral equator continues downward, rounding to the center to return through the muscles, decussating at the equator to again become peripheral, continuing upward, then dipping to meet its point of entrance, thereby producing contraction commencing simultaneously at both ends, resulting in shortening and thickening of the muscle. In all probability it is like the hydro-electric machine, where the simple drop of oil changes its polarity; that suggestion changes the dynamics of these returning or recurrent currents, and produces that physical phenomenon known as mesmerism, Braidism, or the hypnotic sleep so well and charmingly illustrated by Charcot and others.

In summary I maintain that:

1. All matter is the result of the combined atoms of ozone, antozone and hydrogen in definite proportions, and that its ultimate state is that of carbon in its allotropic forms.

2. That oxidation and combustion are physically and chemically two distinct and separate processes.

3. That the quiddity of all force is matter, and that matter, carbon in its atomic state; these atoms being of the same polarity, excite repulsion when they become kinetic and are evidenced in light, heat and electricity, different forms of its manifestations, substantial yet not material.

4. That this carbon kinetic is nerve force, and consequently electrical, that its currents describe the figure-of-eight in their course through the muscle, and are the genesis of ptomaines, leucomaines and other extractive matters. The so-called malarial organisms, when not

eliminated from the system, are factors of disease.

5. That the heart is possessed of double functions; that while being a hollow muscular pump, it is at the same time the chief ganglion of vegetative life and operates through the vaso motor system of nerves, being distinct, but not independent, of the central nervous system.

6. That reflex stimuli need not necessarily reach the brain, the ganglion of origin being sufficient for the production of motion through the filaments, which accompany the sensory filaments and are sheathed by a common neurilemma.

Nitro Glycerine in Emergencies.—Dr. Joseph Burroughs, in an extended article in the *Lancet*, proclaims the advantages of nitro-glycerine in emergencies in which alcohol is thought to be indicated. One to three drops of a one per cent solution is the dose employed. Amongst the diseases and conditions enumerated, in which it has proved of marked value, may be mentioned angina pectoris, nausea and faintness during minor surgical operations, spasmodic asthma, acute prostration from various causes, hysterical aphonia, acute alcoholism, opium poisoning, uremic coma, nephritis, and moribund state.

An anesthetist should always have a vial of the so lution close at hand, especially when chloroform is being administered.

Stable Bichloride Solutions.—Dr. Robert T. Morris, of this city, writes: "Bichloride of mercury solution is frequently made in a wash-bowl; and blood squeezed from sponges into this solution renders the bichloride inert in a few moments. It is a well known fact that several of the acids in solution with bichloride of mercury will prevent this destruction of the salt in the presence of albuminous fluids, and at my suggestion Mr. Painter, of the Brunswick Pharmacy, keeps in stock tablets composed of bichloride of mercury, tartaric acid, and chloride of ammonium. One of these tablets dissolves in a pint of water in about 90 seconds, making a 1-2000 solution of the bichloride that is stable in the presence of albumen.—*Med. Rec.*

Society for the Protection of Victims of Medical Duty.—The first work of this society (French), which has only lately been formed, is seen in its vote to present 500 francs to Mme. Merandon, widow of a physician who, succumbing as the result of diphtheritic infection, contracted from a child patient, left his wife in destitute circumstances. Moreover, the treasurer of the society was authorized to pay all standing debts of the widow, to buy necessary furniture and to provide for all immediate needs. And the society obligated itself to obtain employment for her compatible with her age, capabilities and health.

WEEKLY MEDICAL REVIEW.

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Editor.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

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Original Articles, Reports of Cases, Correspondence, etc., relating to interesting medical topics, are cordially invited.

Illustrations will be furnished free when drawings accompany the contribution.

Contributors desiring reprints can obtain them on favorable terms by applying to the publisher immediately after their articles have been accepted for publication.

Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, JULY 27, 1889.

How Much May We Believe in the Elixir Vitae?

We have had occasion, in the last two issues of the Review to speak of the method of re-invigorating old age, discovered and reported not long since by M. Brown-Sequard, the President of the Biological Society of Paris. The development of this subject, whether it be in the way of substantiation or refutation of his claims for it, will certainly be watched with much interest by scientific men the world over.

It has already met with the kind of reception that awaits every new and radical deviation from the beaten track of custom: Some have received it thoughtfully, others with derision, and still others with neither, but with a tendency to poke good-natured fun at the venerable author. The laws of conventionality are universal and almost inexorable in their severity. It matters not how exalted the position or powerful the influence of him who would transgress them; nor how time-worn with repetition our experience in this direction becomes, we cannot brook, without a vigorous protest, the sudden precipitation on us of any theory or discovery differing from our fixed ideas of what is,and what ought to be.

When the stars grow old,
When the sun grows cold,
And the leaves of the judgment book unfold—

then will we be ready to receive, without frown or derision, the inventor and his invention, the discover and his discovery, and await, without prejudice, the verdict rendered by a fair and unbiassed test of its workings.

From the very nature of the case, anything that is radically different from what we have become accustomed to, appears at first—until we have rubbed our eyes and looked again—wholly unreasonable. Is it *likely* that a few drops of spermatic fluid, introduced into the subcutaneous tissues, would invigorate, to the

wonderful degree claimed for it, the flagging circulation, the stiffened joints, the atrophied muscles, the degenerated tissues? That, in a word, it would rejuvenate old age? And yet, were the claims for the power and scope of hypnotism based on more plausible grounds? Would any of us, a few years ago, have believed that by the influence of no more tangible a force than that of simple will-power, we could make the staid and sober frivolous, the weak strong, the hearty ill, the upright wicked, *the aged young?* That we could change the appearance, the character, the very nature of a human being for a time—yes, even, perhaps, permanently? Yet hardly a fractional part of such power does Brown-Sequard claim for his system of treatment. He lays particular stress on his belief that the influence wrought by it is not through organic change, but through dynamic force—moral, as well as physical, energy being instilled by the little hypodermic syringe.

It must be acknowledged that skeptics and scoffers, not long since, gained a decided victory in the prompt downfall of the Bergeon method of treating phthisis, which failed to sustain the reputation given it by its early supporters. But the collapse of one does not prove the instability of all. Time and impartial investigation alone can do that. We have a lingering suspicion that the skeptics themselves, though loud in their outcries against the foolishness of wasting time by actually applying the Bergeon method would have been loath to see it abandoned because of merely theoretical objections, especially after favorable reports had been received from so many different sources.

Moreover, it must not be thought that this theory and Brown-Sequard's belief in it, are the product of an hour, a day, or a year. He first began his researches into the subject as far back as 1869, and it was in 1875 that he first observed positive effects from it. So we cannot lay the charge of superficiality against him.

Neither is his explanation of its mode of action wholly untenable. He asserts that it is a matter of record that the organism of the eunuch, deprived of the force which would naturally be supplied to it by the testicles, manifests the loss by mental weakness and bodily infirmity. Just so the system of the old man who has arrived at the "sixth age" of the drama of life, feels the want of this accustomed food stimulant, which becomes increasingly pronounced with the lagging functionation of its parent organ.

Very naturally, then, the next step which logic would suggest, and one which Brown-Sequard has already taken, is that of keeping alive the activity of these glands; and with this objtct in view, as well as that of giving the organism the benefit of the secretion supplied by this continued activity, he has tested the merits of the theory by advising an incomplete form of masturbation in the cases of two old men, having them stop ust short of ejaculation. In this way, the secretion, stimulated by the organism, is re absorbed into the system, attaining the same end as is aimed at by the injection of triturated testicle. As a method of treatment this, of course, would never be countenanced, but it has served its purpose as a test; the cases in which it was tried showed the same improvement as observed in those treated by injections.

At the meeting of the Biological Society, of June 29, M. Variot, a Parisian physician, came to the support of Brown Sequard by reporting his experience with the injection method in three patients. The first was a prematurely debilitated man, æt. 54 years; after two injections, he recovered his vivacity and likewise his sexual power. The second patient, æt. 56 years, was the subject of atheromatous degeneration; after three injections he, too, felt renewed strength and activity. His appetite was notably increased. The third, a man, æt. 68 years, suffering from the effects of prostatic hypertrophy, before the beginning of the treatment, was unable to leave his bed. Like the others he was greatly benefited, and recovered his strength, appetite and sexual inclinations. Neither of these patients had heard anything about the nature of the treatment, so that the psychical influence from it was in this respect reduced to a minimum.

In answer to a query of M. Diday as to whether the stimulation of the prostatic gland by the erections ensuing on the return of the genital function, would not induce an acceleration of the hypertrophic growth, M. Brown Sequard assured him that there was no danger from that source; that the erections were insufficient to produce any such effect. In fact, of all the effects observed so far by himself and M. Variot, that on the genito urinary organs had been the least marked.

Circular Enterorraphy and Its Rapid Performance with Easily Improvised Catgut Rings.

Since the great stride in intestinal surgery, taken by Senn, with his decalcified bone-plates, surgeons seem to have vied with one another in their efforts to hit on some material that would take the place of the bone plates and, at the same time, not be attended with certain objections attached to these, for instance, as Abbe says, they are not always at hand, especially for those who are not hospital surgeons, and they cannot be quickly improvised, and at best are not easy to procure. The size and lumen of the plates is always constant and is at best narrow and cannot be easily adapted to particular cases and the varying size of even the normal intestine. If the ring is not thoroughly decalcified it may not be absorbed and may give rise, in turn, to obstructive symptoms. Finally, if these objections hold for the plates in anastomosis, they are particularly emphasized whenever an attempt is made to employ them as approximation plates in circular enterorrhaphy, where a large lumen is particularly desirable.

For these various reasons, then, it was desirable to make use of some other substance than bone in applying the "aided stitch." Dr. Abbe (in the *N. Y. Med. Jour.*, March 23, 1889), of New York, was the first to suggest rings made of catgut for this purpose.

The catgut should be of the heaviest sort, softened in hot water until it ceased to twist upon itself. "It is then formed into a ring of four strands, on the ends of three fingers, and wound over and over with the same sized gut, tightly applied. When completed, it is stiff and flat, with no disposition to curl. The threads are quietly and simply adjusted around the ring, and insure its making a firm pressure until it has dissolved in the bowels. Six silk threads may be attached to the larger rings, leaving an outer space of three quarters of an inch. Each thread should be armed with its own needle, in order to save time."

These certainly possessed great advantages over the bone plates of Senn, as has been acknowledged by surgeons everywhere. Since writing the above paper, Dr. Abbe presented another contribution to the subject, before the Philadelphia County Medical Society (see REVIEW, vol. xix, p. 626, 1889), in which he suggested additional improvements in the construction of the rings, rendering them, when so constructed, practically perfect. But they cannot be so constructed off-hand; a number of them must be kept on hand, and as their size or lumen cannot be varied at will, enough must be kept in stock to fit all sizes of the intestines. To overcome any complication that might arise on this score, Dr. Rudolph Matas (in *N. O. Med. and Surg. Jour.*, July) offers an exceedingly neat and simple arrangement of catgut in thick cords, such as is used in making the base violin, especially in making drums—"drum snares." It is quite resisting and is never softened or digested prematurely.

The advantages claimed for it are: That it is easily procured, that it requires no preparation beyond that of cutting it to the desired length prior to the immediate application, that it is very cheap, is readily digested, and can be easily and promptly adapted to the needs of any special case—a rather important consideration in view of the varying conditions of the intestines.

All the preparation needed in using these rings is to cut the cord just long enough to make it into a ring of the desired length, insert each cut end into a short piece of soft rubber catheter, fasten them there by encircling the catheter ends with silk threads; attach the four threaded needles and it is done.

The mode of application is similar to that used for the bone plates, and is already familiar to our readers.

THE TREATMENT OF UTERINE FIBROMA WITH ELECTRICITY.

An interesting discussion has been going on lately in the Paris Surgical Society, on the subject of the treatment of fibroma of the uterus by means of electricity (galvano-puncture and electrolysis). It was introduced by Lucas-Championnier, an enthusiastic advocate of that method. He claimed to have obtained better results with it than with any other method, in certain cases in which surgery was either inapplicable or inefficient.

For instance, he recognizes that there is only one treatment that is truly radical for uterine fibromata, and that is surgical. In a young woman, in every case where it is possible, ablation of the appendages is the preferable method. But there are many cases which, for various reasons, do not come within this category. For women approaching the menopause it would be entirely unjustifiable to advise any procedure that would take away the opportunity of profiting by the natural arrest of the periodic uterine congestion. In these cases much may be accomplished by rest and medicaments, but how much more effectual will the treatment be when this powerful resource of electricity is superadded?

With respect to its effect on the symptoms, metrorrhagia disappeared rapidly and improvement was readily noticeable in the general condition of the patient. Pain and the feeling of weight experienced in locomotion, or while simply standing, also vanished under the influence of the treatment.

The tumor likewise decreased rapidly in volume. This decrease is due to the relief from congestion of the tumor itself and of the intestine lying near it, and perhaps also to the absorption of inflammatory exudate in the immediate neighborhood. This diminution in volume, distinctly made out by the effacement of the nodules and the possibility of clearly defining the uterine neck, does not continue if the treatment be suspended; the fibroma soon shows a tendency to return to its former size.

But the ultimate benefit of the treatment, if persisted in, may closely approximate permanency, especially if the patient be not far from the period of menopause; then a definite cure may be hoped for.

Should it be impossible to get the sound to enter the uterus, it is not necessary to insist on its introduction, as excellent results may be had, the electrode lying simply within the cervix. The other electrode, applied over the abdomen, is preferably composed of a cake of wet clay, as suggested by Apostoli (see REVIEW, vol. xx, p. 5).

The intra-uterine pole should be the positive, but it is of advantage to reverse the current occasionally.

All maneuvers should be executed with exquisite care, and antiseptic precautions should be observed about the fingers and instruments.

M. Bouilly was far from being so enthusiastic in his estimation of the treatment. While not contesting its well recognized value, and while admitting that it was worth trying when one had nothing better at his disposal, he thought that spontaneous evolution of the tumor should be given full credit for what it occasionally accomplishes. It is not rare to see the pain and hemorrhage, etc., disappear almost spontaneously, or under the influence of almost any treatment, such as rest, injections of hot water, or hypodermics of morphine. Eacerbations of growth and diminution were sometimes very pronounced in such tumors. But, on the other hand, it must be admitted that in a number of cases the influence of the galvanic treatment was undoubted;

Schwartz, Kirmisson, Segond, Berger, LeDentu and others had reported positive results.

Prof. Trelat said that in severe cases which he had treated he had met with no serious accident, and he had attained good results in all, some with respect to the symptoms, others with reference to the tumor itself.

M. Nicaise gave an interesting retrospect of the development of this system of treatment. Since the time of Ciniselli, of Cremona, many had made use of it, but little progress had been made save in the way of instrumentation and operative technique.

Neftel, of New York, who had essayed the treatment of malignant tumors by galvano-puncture, believed that their elimination was accomplished by mortification. Afterward, Cutter, Semeleder, Semmola, Apostoli and Aime Martin had reported their extensive experience with it.

The Pathological Anatomy and Pathogeny of Perinephritis of Renal Origin.

M. Albarran recently read a paper on this subject before the Societe de Biologie (*La Tribune Medicale*). He distinguished three anatomical varieties of perinephritis of renal origin:

1. Perinephritis in which the capsule proper of the kidney is thickened and more or less fused with its fat ty envelope, which contains numerous fibrous strands. This form is common in pyelo-nephritis.

2. Perinephritis involving the fatty capsule of the kidney, especially pronounced in certain cases of calculous pyelo nephritis. In one which the author had seen, fat had replaced the kidney structure to such an extent that the latter was represented only by dilated calices containing calculi. This fatty perinephritis is one of the most striking anatomical characteristics of tuberculous kidney.

3. Suppurative perinephritis. The abscess may be seated beneath the capsule proper, and then the collections of pus may be small or multiple; or, in certain cases, completely envelope the kidney, which is, there fore, continuously bathed in pus. In case the capsule stops at the hylum, the pelvis is not included in the abscess. When the purulent collection develops between the cellulo-fatty lamellæ of the perineal tissue, the kidney, as in the preceding cases, is crowded forward, its proper capsule is thickened and adherent, or, at times, is so thin that it is hardly visible.

The relation of bacteria and the different forms of bacteria to these suppurative renal and perineal inflammations has received much attention from French investigators in the last few years. In seven examinations of pus from perinephritic abscesses, M. Albarran found it to contain pure pyogenic bacteria; once these were associated with micrococci; twice only were the cocci pyogenic. In colored sections it was possible to see how the microbes traversed the walls of the pelvis, and it was proved that they could also pass directly from the kidney into the capsule.

Experimentally, by injection of the pyogenic microbes into the urethra, and then ligating the canal, he had determined invasion of the perineal tissue.

The organisms follow the lymphatic channels. The difference between the lymphatic vascularity of the kidney and of the bladder explains the relative variety of perivesical abscesses of vesical origin.

Twice, by injecting pyogenic microbes into the blood of rabbits, M. Albarran had set up suppurative nephritis and perinephritis. In his opinion this confirms the hypothesis of latent microbism, and accounts for abscesses the result of direct contusions or by indirect injury from forced marches or violent exercise, exaggerating the normal mobility of the kidney.

Appreciating our State Board.

The support that has been accorded the State Board of Health, heretofore, has been entirely too lukewarm and apathetic, and has reaped its reward in the stupidly short-sighted and obstinate policy of the recent legislature toward it. That this is beginning to change, that the reaction is coming, is indicated by the following preambles and resolutions,which were unanimously adopted by a rising vote at the meeting of the District Medical Society of Northwest Missouri (a society embracing within its territory nineteen counties) held in the city of St. Joseph on the 11th inst.:

Whereas, In the judgment of this Society the State Board of Health is an institution important and necessary to the sanitary interests of the State; and

Whereas, The members of the State Board of Health of this State have not only devoted their time and energies to the promotion of its objects without proper pecuniary compensation, but at a great personal sacrifice of time and money in order faithfully and conscientiously perform the duties imposed upon them by the legislature; therefore, be it

Resolved, That we, the members of the District Medical Society of Northwest Missouri, hereby extend to the said members of the Board our cordial encouragement, and promise our co operation in any way that it may be possible for us to aid them in the performance of their duties.

Resolved, That the corresponding Secretary be instructed to forward a copy of these resolutions to his Excellency, Governor Francis, and to the Secretary of the State Board of Health.

Thos. H. Doyle, M.D.,
President.

Daniel Morton,
Secretary.

The Trustees of the College of Physicians and Surgeons are to be congratulated on the character of the "new talent" being added to the forces of that institution.

MEDICAL ITEMS.

Anatomical Philology.—Why is it called the "funny bone?" Because it borders on the humerus.

Dr. A. A. Henske has resigned his Professorship of Obstetrics and Clinical Gynecology, at the College of Physicians and Surgeons.

Progress of the Three-Year Movement.—With and after the session of 1890, an attendance upon three regular courses of lectures will be required by the Missouri Medical College as a condition of graduation.

A Compliment to Dr. Hughes.—Our neurological friend and fellow-townsman, Dr. C. H. Hughes, has received the substantial compliment of the presentation of his portrait in the July number of the "Medico-Legal Journal."

Another Medical Journal.—We welcome, with pleasure, a new candidate for honors in the field of medical journalism. May the "Western Medical and Surgical Reporter," of St. Joseph, meet with all prosperity and success.

Changes at the College of Physicians and Surgeons.—It is stated officially, that amongst the late acquisitions of this College are Dr. Y. H. Bond, who takes the Professorship of Gynecology; Dr. Wm. Porter, Professor of Diseases of the Chest; and Dr. I. N. Love, Professor of Diseases of Children.

A Lilliputian Wonder.—Seymour, Indiana, is the proud possessor of a curiosity in the shape of a female child, born July 7th, last, and now weighs one pound. A lady's finger-ring can easily be passed over its hand and arm to the shoulder, and its entire body can be completely covered by a pint cup. The parents are of ordinary size, healthy, and have several children of full growth.

A Fatal Box on the Ear.—Two young men of New York were quarelling; one struck the other a blow on the side of the head with his open hand. The injured one turned pale and went home, soon afterward complaining of pains in the head. Four hours later he became unconscious and died an hour afterward. The post-mortem examination is anxiously awaited by all parties concerned.

The American Rhinological Association will hold its seventh annual meeting at Chicago, Ill, August 28, 29, and 30, 1889.

The Committee on the examination of the Inmates of Insane Asylums will make their report, "On the Relation of Rhinal Inflammations to Mind Affections," at this session. Any information desired may be obtained from the Secretary, Dr. R. S. Knode, Omaha, Nebraska.

Changes at the Missouri Medical College.—Dr. Louis E. Newman has been appointed Assistant Demonstrator of Anatomy, and Dr. W. Keating Bauduy, Assistant to the Chair of Psychological Medicine and Diseases of the Nervous System.

Those who are wondering where Dr. Bremer is spending his summer vacation, will be surprised to learn that he is simply supervising the construction of a Physiological and Biological Laboratory in the College basement.

The Mississippi Valley Medical Association.—The next annual meeting will be held at Evansville, Ind., September 10, 11, 12, 1889. The Secretary reports that the indications are that the coming meeting will be larger than any yet held by the Association.

The list of names of contributors of papers is already a long one and some of the leading physicians and surgeons of the West are among the number. Those wishing information concerning the meeting should address the Secretary, Dr. R. L. Thomson, 3555 Olive St., St. Louis.

No Yellow Fever this Year.—Dr. Hamilton, Surgeon-General of the Marine Hospital Service, says that, up to the present, no intimation has been received of any suspicious cases in the yellow fever district, although the officers of the service are under instructions to keep the sharpest lookout for any such. It was July 28th that the first case was reported from Jacksonville last year. Owing to the thoroughness of sanitary inspection and the excellence of the hygienic conditions prevalent in this city, there is less danger of an epidemic there than ever before.

Important to Microscopists—$250 Prize to Discoverer of Each New Disease Germ.—The Vermont Microscopical Association has just announced that a prize of $250 will be paid to the first discoverer of a new disease germ. The wonderful discovery by Prof. Koch of the cholera germ, as the cause of cholera, stimulated great research throughout the world, and it is believed that this liberal prize will greatly assist in the detection of micro-organisms that are the direct cause of disease and death. All who are interested in the subject and the conditions of this prize should write to C. Smith Bynton, M. D., Secretary of the Association, Burlington, Vt.

The Crematory.—In making his first annual report of the workings of the Missouri Crematory Association, Mr. C. A Stifel, the President, congratulates the association on the unexpectedly liberal encouragement and universal favor with which the project has been met. Since the severe set-back in the shape of a fire which gutted the building last January, improvements have been quite extensive, and means have been taken to prevent any repetition of such a disaster. Flower beds, trees, shrubbery, graveled roads, etc., now lend attrac-

tiveness to the grounds, so that it is not such a somber looking place as one's fancy might depict.

Changes at the Beaumont Hospital Medical College.—Dr. R. M. King has been elected Professor of Obstetrics and Diseases of Children, vice Dr. Coles, resigned. Dr. W. A. McCandless, Demonstrator of Anatomy, vice Dr. Babcock, resigned. Dr. E. E. Furney, Professor of Materia Medica, Therapeutics and Hygiene. Drs. Walter L. Blickhahn, Benno von Steinmetz and J. P. Hennerich, Assistant Demonstrators of Anatomy. Dr. Geo. Richter, has resigned from the chair of Physiology.

The winter session embodies a period of seven months, from September to March, inclusive.

Improvements at the Protestant Hospital.—The Protestant Hospital Association has recently been the recipient of some generous donations, amongst which we note the following: By Mr. and Mrs. Thos. B. Dyer, a strip of ground running along the south line of the hospital property, and which is equivalent to, at least, $1000. Mr. Alex. Largue, before his decease, expressed a determination to make a bequest to the hospital of $500. He died before he had completed his will, but his widow and son, Mr. Alex. Largue, jr., have voluntarily paid over to the hospital association, their proportion of this $500. Mr. Wm. R. Pye, has shown his liberality by donating $5000. That the hospital is in a flourishing condition is shown by the fact that want of room compels the erection of an addition and the making of alterations to the extent of $10,000; this work is now in progress. Twenty-four new private rooms will be added.

TRANSLATIONS FROM THE GERMAN.

By Dr. Benno von Steinmetz, St. Louis.

Treatment of Asthma.

Dr. Zipp, Freiburg, says: Among the many remedies employed, used empirically in the treatment of asthma, is one which is to be recommended in cases where the cause of the attack is suspected to be in the nose; this is the widening of the nasal air passages by bougies. The following cases will illustrate this practice. A young lady was afflicted with asthma; on examination it was found that the nasal septum was very much bent to one side, and its mucous membrane touched the inferior turbinated mucous membrane. The introduction of Hegar's bougies between the two structures stopped an attack within three minutes after their introduction. Another healthy young woman showed on examination, a crooked septum, the mucous membrane of which was swelled from a slight catarrh and, with that of the inferior turbinated bone, nearly occluded the opening. The attack of asthma was aborted by introducing a bougie, separating the two membranes, and the return of the attacks was prevented by keeping the bougie in place until the disappearance of the catarrh reduced the swelling in the mucous membrane.

This operation is easily done without narcosis or assistant and should be employed in cases where the above mentioned condition is found.—*Med. Chir. Rundschau.*

Examination of Sputa.

Dr. Hausman says: It would seem superfluous to say more about the necessity of examining the sputa for the presence of Koch's bacilli. It should be done in all cases, where the least doubt as to the character of the disease exists. The busy practitioner, who has neither time nor opportunity to conduct this examination himself, should send such sputa to competent men for examination. The following case will illustrate the value of this: I was consulted by a patient, who had been given up by several prominent men in the profession. He was very much emaciated, had high fever and diarrhea, the middle lobe of the right lung and the upper half of the left lung as low as the nipple was infiltrated and softened; expectoration was painful; it was nummular and sank in water; a year previously one testicle had been enucleated, as a tumor, followed by an abscess, had formed in it. On account of general tuberculosis he had been sent to Meran, and a very unfavorable prognosis had been given. Shortly after his arrival the spinal column was affected by the disease and the least movement and touch were almost unbearable on account of the pain experienced. The patient, in fact, seemed near dissolution. At that time Koch's discoveries had just been published, and as I wanted to experiment and get familiar with the bacillus, this sputum was just the specimen, in which I expected to find any number of bacilli. To my surprise I could not detect a single one, and the result of the examination made by Koch's own students was equally negative, although the sputum was repeatedly and carefully examined. The patient, who had up to this time denied any syphilitic infection, admitted then, the possibility of this disease, and the appropriate treatment confirmed this diagnosis in a remarkable manner. The patient is at present not only alive, but cured of the diarrhea and fever, almost free from pain, and, despite his previously diseased lungs, quite well. This result could not have been attained without the examination of the sputum, and the changed diagnosis and treatment are based on this examination. It is even questionable, whether, if the correct diagnosis had been made earlier, castration would not have been obviated.—*Med. Chir. Rundschau.*

Antifebrin in Typhoid Fever.

Dr. H. Haas comes to the following conclusions, based upon numerous observations: The antipyretic effect of antifebrin on the high temperature and disturbance of the nervous system of typhoid fever patients is sure,

easily obtainable, and not followed by bad consequences; the favorable influence of this remedy upon the nutrition of the diseased organism is very marked; it does not retard digestion, is taken without disgust and stimulates the inclination to eat. The reported troublesome after-effects are generally caused by too large doses. To combat hyperpyrexia it is necessary to give larger doses, but in the majority of cases, it is sufficient to double the dose for one day only. The writer found that 15 grains a day was sufficient and he gives it in three grain doses every two hours; the balance of the 24 hours he omits giving any. Great variation in the morning and evening temperature calls for careful adminstration of the remedy; if rigors followed by perspiration come on, the doses must be diminished and the patient carefully watched.

According to the writer, antifebrin comes next in efficiency to the cold water treatment, but it is more easily carried out. The counter-indications to this remedy are: bloody stools, perforation and pulmonary complication.—*Med. Chir. Rundschau.*

Distention of the Stomach as Aid to the Diagnosis.

Dr. Angerer, in Munich, has made numerous experiments on the cadaver and on living persons by distending the stomach with gas evolved from bicarbonate of soda and tartaric acid. If the healthy stomach is filled with gas, the contour of the organ is plainly recognized, the pylorus pushing to the right and downward. Any tumor of the stomach can in this way be easily located, and furthermore, it can be demonstrated whether the tumor is bound down by the pancreas, as in this case the pylorus does not push downward and to the right, but is either stationary, or perhaps, shoved to the left. This is of great importance in the question of the result of an operation on the pylorus, because a typical resection of the pylorus can only be successfully carried out if the pancreas is not involved. The Doctor thinks that with this aid to the diagnosis, tumors of the pylorus and stomach can be demonstrated earlier and definite steps may accordingly be taken to make the operation of resection of the pylorus more successful than it has been. The probability of a successful issue will be enhanced, as nearly all of these operations have been delayed too long.—*Med. Chir. Rundschau.*

Social Evil in Russia.

The new system of protection, proposed by professor Rospelow, consists in issuing cards to prostitutes, with their state of health inscribed. These cards are only good for three days and a half after inspection and instead of the prostitute going by a name, the card shows her photograph and her number.—*Le Bull. Medical*, July 23.

BOOK REVIEWS.

A Manual of Instruction for Giving Swedish Movement and Massage Treatment. By Prof. Hartvig Nissen, Director of the Swedish Health Institute, Washington, D.C.; Late Instructor in Physical Culture and Gymnastics at the Johns Hopkins University, Baltimore, Md.; Author of "Health by Exercise Without Apparatus." Pp. 128; 29 original wood engravings. F. A. Davis, Philadelphia, 1889.

Massage and the Swedish movemennt have come to be such generally recognized essentials in the treatment of diseases and ailments, more especially of a chronic nature, in connection with the Weir-Mitchell cure, electricity, etc., that there is hardly room for doubt that this little work will meet with a hearty welcome from the progressive members of the profession.

As its title indicates, it deals with the subject in a manner that presupposes a comprehensive lack of information regarding it—just the property which will recommend it most strongly. In fact, the book has been written in compliance with a generally-expressed demand on the part of the profession whose interest and attention were aroused by Professor Nissen's address on "Swedish Movement and Massage Treatment,"delivered before the Clinical Society of Maryland, in March, 1888, and which afterward appeared in several medical journals.

In addition to detailed descriptions of the various movements, the author gives direction and advice as to cases and diseases in which they are respectively applicable. Many useful hints are offered and may be adopted with advantage in the sick room and without the aid of special apparatus.

Transactions of the Southern Surgical and Gynecological Association, Vol. I. Session of 1888.

This volume comes to us with all the indications of care and pains taken in its production; clear type, good paper and a handsome cloth binding equip it for the challenging inspection of any critic.

These Transactions record the proceedings of the first annual meeting of the Southern Surgical and Gynecological Association, held at Birmingham, Alabama, December 4, 5, and 6, 1888, and contain many valuable and interesting papers, amongst which we note the following:

"Gastrostomy," by Dr. W. B. Rogers, of Memphis, Tenn.

"Chronic Pelvic Cellulitis and the Conditions which Simulate It," by Dr. Virgil O. Hardon, of Atlanta, Ga.

"The Medical Treatment of Fibroid Tumors of the Uterus," by Dr. Bedford Brown, Alexandria, Va.

"Antiseptic Surgery in Country Practice," by Dr. J. M. Taylor, Corinth, Miss.

"The Present Status of Electricity in Gynecology," by Dr. J. R. Buist, Nashville, Tenn.

"Hysterectomy in Cancer of the Uterus," by Dr. W. H. Wathen, Louisville, Ky.

"Forces Preserving Cerebral Integrity," by Dr. W. Locke Chew, Birmingham, Ala.

"Shock of Injury and Its Effects," by Dr. John P. Page, Birmingham, Ala.

"New Treatment of Intra-Uterine Fibroids," by Dr. E. J. Beall.

"Electrolysis in the Treatment of Urethral Stricture," by Dr. S. M. Hogan.

The Association will hold its next session at Nashville, Tenn., beginning with the second Tuesday of November, 1889.

BOOKS AND PAMPHLETS RECEIVED.

A Contribution to the Study of the Traumatic Neuroses (Railway-Spine). By L. Bremer, M. D., St. Louis. Reprint from the "Alienist and Neurologist, July, 1889.

Annual Announcement and Catalogue of the Baltimore College of Physicians and Surgeons.

Ninth Annual Announcement and Catalogue of the University Medical College of Kansas City.

I. Report of a Case of Hystero-Epilepsy in a Man.
II. A case of Hodgkin's Disease, Accompanied with a Possible Resulting Paraplegia.
III. Report of a Case of Stricture of the Rectum, the Probable Result of a Specific Vaginitis.
IV. Report of Amputations Performed at the Hospital of the University of Pennsylvania, from September 30, 1874, to December 31, 1888. By Lewis H. Adler, Jr., M. D., Resident Physician, University Hospital, Philadelphia. Reprinted from the "Med. News" and the "Med. and Surg. Reporter."

Sixty-fifth Annual Announcement of the Jefferson Medical College of Philadelphia.

Annual Announcement of the Beaumont Hospital Medical College, St. Louis.

First Report of the Protestant Hospital Association, St. Louis.

The Physician Himself, and Things that Concern His Reputation and Success. By D. W. Cathell, M. D., Baltimore, Md. The Ninth Edition, Revised and Enlarged. Pp. 298. Price, $2.00, net. F. A. Davis, Philadelphia and London, 1889.

Retrecissement Cicatriciel du Larynx d'Origine Syphilitique; Tracheotomie; Dilatation Quotidienne Pendant Six Mois; Guerison (Cicatricial Stricture of the Larynx of Syphilitic Origin; Tracheotomy; Daily Dilatation During Six Months; Recovery). By Dr. Gouguenheim, Physician to the Lariboisiere Hospital, Paris. Reprint from "Annales des Maladies de l'Oreille, du Larynx, du Nez et du Pharynx." 1889.

SELECTIONS.

DOUBLE MONSTROSITY.

On April 21, 1889, I delivered Mrs. D., after a natural labor (as far as presentation, passages, etc., are concerned) of a double female monster, at the eighth month of utero-gestation. Thinking the case to be of interest and of rare occurrence, I at once had it photographed. The accompanying engraving, which shows the anterior aspect, speaks for itself. The double set of limbs were perfect in every respect, as also were the

spinal columns, backs and shoulders. The anterior walls of the chest and upper part of the abdomen were joined together, and the umbilical cord arose from the junction of the two bodies. The anterior and lateral parts of the head appeared as one large head, the eyes, nose, mouth and ears being perfect. At the back of the head was a shallow longitudinal sulcus, in which appeared two more ears. The head was well covered with hair. The weight of this monster was about 6 lbs.—Wm. Henry Walter, M. D., in *Lancet.*

A BRIEF SUMMARY OF NASAL CATARRH AND ITS TREATMENT.

BY BEVERLY ROBINSON, M.D.

Read before the New York Clinical Society, April 26, 1889.

* * * For the over-enthusiastic and somewhat narrow specialist, who is too ready to accept the doctrine that most, if not all, pharyngeal, laryngeal and tracheal inflammations are the inevitable sequelæ of nasal disease, and that the nasal disease is usually due to obstruction of the respiration, it is relatively simple to say: "Free the nasal chambers by judicious operative procedure and a cure will follow." To those of us,

however, who look at the ills of humanity from a wider field of vision, such an affirmation often falls short of truth. We know only too well that, while occluded nasal passages are highly detrimental to a good condition of the remaining portion of the respiratory tract, yet morbid affections of the throat and bronchi may and do occur frequently when no nasal occlusion exists; and, further, that a simple operative procedure which opens the nasal fossæ when they are obstructed is by no means always sufficient to effect a cure of catarrhal inflammation of the naso-pharynx or lower down in the air tubes. This is due to the fact that inflammation of the respiratory mucous membrane may be occasioned by a large number of conditions, some of which act directly or as mere local irritants; others which affect the general system, are thus in an indirect manner the efficient factors which occasion the local disturbance. In another and very wide category may be placed the influence of geographical position; in another, winds and rapid changes of temperature; in another, the effects of climates and seasons; in another, hereditary tendencies; in another, modes of life and habitual surroundings; in another, fatigue, emotional disturbances, accidental causes, etc. To continue and enumerate all possible causes of catarrhal inflammation of the nose and other portions of the air-tract becomes indeed a difficult task.

In connection with the symptoms of nasal catarrh referred to above there may be discovered certain local abnormal physical conditions—*i. e.*, deviation of the septum, mucous-polypi, adenoid vegetations, etc. Again, the general system may be vitiated with gout, syphilis or tuberculosis. Finally, all evidences of dyscrasia may be wanting, and the affected person may be in other respects perfectly healthy, and, except for the obstructive feeling in the nose or the hawking and spitting from the throat, or of these united conditions, would have absolutely no source of physical grievance. Now, if we look back through the history of the ages, we shall find all sorts of theories regarding catarrh. Catarrh is not a disease only of to-day; it has probably existed since the origin of man.

There are other observers, however, especially of the German school, of whom Niemeyer is an example, who hold steadfastly to the notion that catarrh is altogether a local trouble. There is at times undoubted truth in that view, so we perceive there is some truth on one side and some on the other. It remains for us to determine where the exact truth lies in individual cases. That there may be a constitutional condition to account for catarrh, I believe as firmly as I did fifteen years ago, but we may not be able always to discover it or to tell in what cases it is or is not present. It may be obscured by other diathetic conditions, such as gout, syphilis, rheumatism or tuberclosis. You may not, however, be able to recognize any of these dyscrasiæ in a given case, yet the patient, although quite healthy in other respects, has persistent catarrh. This condition, in my opinion, is to be accounted for in one of two ways —either by a special dyscrasia, which keeps up the catarrh, or by external conditions, such as those due to atmospheric changes, soil, climate, dust; special vocations, habits, etc. The interior conformation of the nose has its importance as an exciting factor. In many noses the nasal septum deviates notably to one side. The amount of deviation is variable. In the larger number of persons it is slight and only causes annoyance at times, when there is suffering from a cold or irrational treatment. In a few individuals, relatively rare when compared with the vast number who have no such infirmity, the amount of obstruction due to the deviation of the septum necessitates an operation for relief of the symptoms caused by it. Frequently nasal catarrh is little more than the consequence of a bad habit which has been persisted in. When the habit is abandoned the nasal difficulty can be cured with ease.

I have recognized (as a good many others have recognized) and demonstrated that douches through the nose can only wash, cleanse or purify a portion of the nasal cavity. The opening at the posterior nares is of not more than half the height of the nasal chambers at the median portion, and the douche will only wash out the lower portion, including, sometimes, the median meatus. It may cleanse the inferior turbinated bodies and a portion of the median, but as usually employed, it never reaches the upper part of the nasal passages. I have again and again seen patients wash out the nose with the douche, and immediately afterward have found secretions sticking to the upper part of the passages. Then, the douche has often given rise to median otitis. This has been proved by Roosa, Knapp, and others, and I have helped spread the knowledge myself somewhat. As to the kind of solution employed it has been variable. During the past ten years pretty much everything has been tried that one could think of.

But if a man has an occluded nose and uses douches, he will find out that they will occlude it more. If he has a pretty free nasal cavity, they will at first tend to cleanse it, but after a week or a month he will tell you that his condition is as bad as it was. Only temporarily is his obstruction relieved. Still, here and there, it has been maintained with some show of truth that the use of the douche is attended by cure of catarrh, but such cases in my experience have never been observed. Now, with regard to the spray, some years ago I believed the spray was curative of many nasal troubles, but now I hardly believe it will cure any case. I believe, however, it is sometimes an aid. Some sprays are better than others, and some are really injurious. Good sprays act as a cleansing measure better than the douche. A cure may be effected in a few cases by their use, but such cases must be very infrequent. If the spray is too dilute, not carrying sufficient of the active medicament, positive results will not be produced; if it is too concentrated, it hurts, and produces unfortunate results, because you can not limit it to the points requiring treatment. After forming the notions just mentioned, I began to use powders in all forms, and

for a while I believed we could often cure catarrh with them, but I no longer believe it. I believe they are better than douches; they do less harm. I believe also they are better than sprays, because the medicament which they may carry remains for a longer time in contact with the parts affected. It is only necessary to recall the form of the nasal passages to be impressed at once with the impossibility of limiting the douche, the spray, or the powder, to the part from which the secretions flow in nasal catarrh; that is, to the diseased tissue. But of the three measures mentioned, I think powders are rather better than sprays, and certainly better than douches. For a year or two past I have, so far as concerns the anterior and median portion of the nose, relied more on ointments to produce curative results. There is one objection to them, namely, that they can not be made to reach so much surface as the spray, douche, or powder does, but I believe an ointment is better for application to an inflamed mucous membrane than a water, the reasons for such belief being physiological. I have not time to repeat them here; they are to be found in some of my writings. I introduce the ointments on applicators, or have the patients sniff them up. At present I am using a spray of carbolized oil. This, being a spray, has, in the first place, the advantage of a spray; it further possesses the advantage of an oleaginous agent, and in addition is a medicament, since it carries carbolic acid. Another method of employing medicinal agents locally is in the form of vapors. You may put the medicament (it must be volatile) into water and raise this to a sufficient temperature to make a vapor to be inhaled. It will come in contact with all parts of the mucous membrane, and might be supposed to be an excellent method, but practically it is a failure, for under it a patient grows worse. Dry vapors properly used are, in my estimation, sometimes very valuable. They may be employed in various ways. I now use a little inhaler which bears my name. It costs only fifty cents and is, I believe, more serviceable than any instrument for a similar purpose which can be bought even at a much higher price.

Sometimes these local medicinal measures will all fail to relieve materially, much less to cure entirely, and you may not be able to recognize any diathesis to account for the catarrh. In this position you may recur with some advantage at times to one of three remedies for internal administration. These are cubeb, sulphur and ammoniacum, which have been recognized for more than a hundred years as of benefit in inflammation of mucous membranes. Sulphur may be used in spray (sometimes advantageously mixed with pine-needle extract, as is now done at Sharon Springs, N. Y., and at certain springs in Europe), or it may be taken internally in the form of sulphur water. Such waters, abroad and in our own country, have been used beneficially in catarrhal affections. This treatment has its objections, but I will not stop to point them out.

Regarding cubeb, I think I was the first to use it in nasal catarrh in an extensive way. I think well of its use in selected cases, and believe it has a desirable modifying effect upon the diseased condition of the mucous membrane. It may be given with a probability of being useful in cases in which catarrhal dyscrasia is apparently present, and provided the digestive organs are undisturbed. Ammoniacum is also useful only in certain cases, for in some it causes the secretions to become too thick and tenacious and hard to remove from the nose or naso-pharynx, so that it has to be given up. So much can properly be said in regard to the intelligent medicinal treatment, local and general, of numerous cases of nasal catarrh—in persons in whom it may or may not be due to a diathetic condition, who are otherwise in good general health, and have, so far as can be recognized, no invincible or considerable degree of local obstruction which acts as the evident or sole cause of the catarrh.

There are many persons who come to the physician with catarrh and have some obstruction due to hypertrophy of the turbinated bodies, yet who can be cured by milder measures if the catarrh has not existed for too long a time. But when you find that ointments, vapors, etc., and some judicious general medication, with proper attention to coincidents or complicating affections, habits, surroundings, and all measures of good hygiene, do not produce curative results, try something a little more severe; sometimes acids avail. We all know that at present we need not hurt the patient in making these applications, since we can use cocaine or rhigolene with the happiest effects to reduce the sensibility of the mucous membrane.

A few years ago I used nitric acid considerably, but I do not think so much of it now. Then glacial acetic acid was used by me; then monochloracetic acid, which I still employ and regard as one of the best acids for cauterizing the nasal mucous membrane.

If milder measures do not avail, you can wrap a piece of cotton on a steel carrier, dip it into one of these acids, and carry it up and through the nasal passage, following particularly the lower meatus, or the inner margin of the middle turbinated body. I think, to be prudent, you had better cover one side of the applicator with vaseline or oil, using the monochloracetic or other acid on one side only. The monochloracetic acid acts somewhat curiously; it produces a slough, but the slough does not come away until the mucous membrane beneath is so far healed that there is no danger of adhesions. Another acid used by a number of specialists in this city with a very liberal hand is chromic acid, and I may say that, on the whole, this is one of the best agents we have for producing a cauterizing effect, and if used properly it is not followed by unpleasant results. But try your patient. Do not use too much of the acid at once; do not get the poisonous effects from absorption as ocaasionally occurs when it is employed too freely. (According to Dr. Squibb, "every molecule of chromic acid which destroys a molecule of organic tissue is itself destroyed and rendered inert by being reduced to an insoluble and inert oxide of

chromium." Hence, it may be, these fears of some persons are groundless.) I have never been troubled with symptoms of poisoning, but unless care is used, it is not impossible for them to take place, as a portion of the acid employed may not come in contact with the soft tissues and may therefore be entirely neutralized.*

When, then, monochloracetic acid fails, I believe chromic acid to be the next best for freeing the obstruction of the nose, especially when there is beginning hypertrophy of turbinated bodies. Any ordinary carrier —the simplest of all being a piece of copper wire flattened and bent at one extremity—will answer usually to make these applications. Occasionally, however, where it is desirable to make the contact far back in the nasal passages and where the anterior and middle portions of the nasal chambers are not very open, it is advisable to make use of a shortened McCoy's applicator, which enables one to apply the chromic acid at any particular point without risk of touching neighboring surface. (Latterly I have relieved a patient, who suffered from a large mucous polyp, lodged high up in the posterior nares, that I was unable to get hold of with the forceps or snare, by means of this useful instrument.) Some times the obstruction is due in part to a chronic inflammatory condition with thickening of the turbinated bodies, and in part to deviation of the septum. Occasionally the obstruction from thickened turbinated bodies may be overcome and the patient still complains of the nose being occluded. In these instances, and when the septum is obviously the cause of the occlusion, a suitable operation must be performed for a removal of the offending portion of it.

Some years ago there were physicians who asserted that one of the best agents for overcoming deviation of the septum and thickening of the turbinated bodies was the galanvo-cautery, but others professed to get only bad results from it; they said that it set up otitis or erysipelas, and did untold harm by producing adhesions between adjacent parts. From my present standpoint, I believe the latter class did not employ a good instrument,or did hot know how to use it. I have never excited erysipelas or otitis with suppuration by this method, and I believe thoroughly in the method in very many and suitable cases. The use of the cautery, properly applied after the diseased parts have been anesthetized with cocaine, is attended with neither pain nor more than very slight bleeding, as a rule.

Usually, when I find a septum with a prominent deviation anteriolry, I take a Jarvis' or Weir's cutting forceps, and in a few moments, after cocaine has been applied, cut away as much tissue as is required to relieve obstructed breathing from this source.

The cartilage nippers are a little more tedious to use than the saw, but they are often preferable. The saw is an excellent instrument for many cases. It has, however its drawbacks. You can not saw around the corner; the saw must go straight ahead. With it you can not take away more tissue here and less there; and you can not always stop when you want to, but must go on and remove the piece and take it out. Suppose the patient is weak and there is more bleeding than is desirable, yet you must go on with the operation. Whenever the means described fail to relieve intranasal obstruction, we may have recourse to the trephine. Having a battery of sufficient power, get a nasal trephine and, in cases demanding it, bore one or more holes through or along the projecting spurs of the septum. The ridges which remain after the use of the trephine may be pared down with suitable scissors, with nippers, or even at times with the snare.

If you have a case of nasal polyps, one way to get rid of them is by the forceps. But it is not a very pleasant method. You may snare them off with the cold wire snare or with the galvano-cautery wire. The snare is a pleasant means of removing them, but you must first use cocaine to prevent slight pain and uncontrollable sneezing. The galvano-cautery or cold wire may also be employed in treating posterior hypertrophies of the turbinated bodies, but it may prove easier to try chromic acid. Some years ago some physicians professed to be able to cure nasal catarrh by applications of strong solutions of nitrate of silver to the naso pharynx and posterior nares. I was once a victim of that method of treatment. The application of nitrate of silver relieved me for twenty-four hours, but afterwards the catarrh returned as bad as previously. The silver salt had simply placed a flim over the secreting surface and given relief for a while, or until the flim came away. Then there are all sorts of quack cures for catarrh. Some of these remedies which are advertised possess certain curative properties for certain cases, but it is not safe to use them unless their composition has been determined by analysis, in which case you can as well prescribe your own mixture, which will cost the patient much less and do, of course, just at much good. When a quack remedy gets a hold in the market it is well to learn what its principal ingredients are, since it may prove of some use to you in practice. But do not prescribe a quack article. Formulate a remedy of your own to use in its place. While all sorts of quack catarrh remedies are to be found in the shops—some from London, some from Paris, and some of home make — yet it will be observed that they do not cure cases of nasal polyp, septal deviations, ulcers, etc. So-called catarrh remedies, seen mentioned in advertisements, are usually injurious to a greater or less degree to the patient, although occasioually they are employed in cases in which it is possible for them to do some good.

After all that has been said it must be admitted that changes in the climate, filth, sewer-gas, malaria, and what not have much to do with the production of catarrh. Catarrh in many cases is nothing but a filth disease and Dr. Mackenzie, of London, says that that is the chief cause of catarrh in the United States. He says there is no such thing as scavenging in this

*A death from the two-free use of chromic acid to chancroids of the vulva,has recently been reported.—Ed.Review.

country. This is quite true of some places, but there are towns where catarrh prevails which are as well scavenged as any town in England.. There are cases of catarrh in this city which are undoubtedly kept up by filth, by irritating particles floating in the atmosphere, carried hither and thither by the winds, such as horse-dung and fermenting, putrefying substances. Do not consider, then, that any specialty by itself will control the situation. The treatment of the nose may be well enough where it is indicated, but where filth is the cause of catarrh something more must be done. At the Congress of American Physicians and Surgeons, held in Washington last September, Dr. Wm. A. Draper, in his presidential address before the Association of American Physicians, presented in a very graphic and striking manner what should be regarded as the qualifications of the practical physician to day. He must be a man of broad views, who has all kinds of knowledge ; who controls the whole medical situation. He is not a bacteriologist; he is not a pathologist; he is not a chemist or a physicist; he is merely a therapeutist; he is not a specialist of any sort, nor does he look at clinical medicine from any limited horizon; but he is a man who in some sense is master of all these several branches of medical education by reason of combining as much as is possible of the sciences which these different divisions represent, and thus perfects the most beneficent of all the arts. "It is he who, in his high position as the servant of humanity, must attain that wisdom which results from combining knowledge with the instinct and the skill for its useful application." Therefore get as much knowledge of specialties as you can, but always feel that the broad standpoint is the correct one. The family physician, be certain, will one day resume his former position in the household. using all the power that rightfully belongs to him, but it will be in a modified manner and more in accordance with the wide extension of knowledge. He will no longer be expected to know everything in such a way that he is able to pass unaided expert judgment on all human ills, nor will he be expected to operate in all cases requiring surgical interference. He will, however, be the person to whom each member will turn for advice in all bodily ailments, and by whom he will be guided entirely whenever it is a question of special interference with any particular organ. Nor will he ever lose, as he frequently does at present, any of his laboriously earned prestige because he is not wholly "up" with the very latest "wrinkle" in all departments, nor because he hesitates wisely in adopting every novel idea before it is proved to be *good* as well as new.—*N. Y. Med. Jour.*

Epithelioma of the Cecum.—M. Michaux presented to the Academy of Medicine, Paris, a cylindrical epithelioma of the cecum which had caused much trouble in diagnosis.

THE COMPARATIVE VALUE OF THE DIFFERENT METHODS OF TREATING ACUTE GONORRHEA.

Under this somewhat misleading head, Dr. Andre Martin, physician-major, publishes an interesting article in the *Jour. de Medicine*, in which he contrasts what he calls the old with what he calls the modern methods of treating acute blennorrhagia.

The old or classic treatment begins at a date more or less remote from the onset of the disease, respects the period called inflammatory, and is directed to the stationary period (*periode d'etat*) and period of decline; it is both general and local, including, with rest and dieting, the balsams (copaiba, gurjun, sandal) alone or combined with injections; the latter are astringent (sulphate of zinc, acetate of lead), or simply protective, like bismuth and silicate of potassium. All these injections have been accused of causing stricture, but the French writer declares it as his conviction that the duration of the flow more than nature of treatment contributes to the formation of consecutive strictures.

In a first series of clinical experiments, Martin, following the precepts of Fournier, treated all the patients of his army corps for a fortnight with local and general baths, emollient, mucilaginous drinks, bicarbonate of sodium, etc.; and it was not till during or at the end of the third week, when the discharge and micturition were without pain, that he began the use of copabia, alone or associated with cubebs, and injections of sulphate of zinc—one grain to the fluidounce, from one to five injections a day, in an increasing ratio up to five injections, then in a decreasing ratio back to one injection a day. During the stationary period the zinc injections are well borne, and seem to favor the action of the balsams ; the latter were not always prescribed; but in all cases a mild and cooling dietetic regimen and the use of emollient drinks preceded the employment of the injections. The following are the statistical results of this method. The average duration of the treatment is based on the number of days spent at the infirmary or hospital.

Number of cases of blennorrhagic urethritis - -	62
Days of treatment - - - - - - - - - - - -	1684
Average duration - - - - - - - -	27.16

These figures agree to the fraction of a unit with the statistics of the Arzew Hospital, which, out of one hundred and thirty cases, gives the average duration as 27.26 days. Since 1884 Martin has invariably had recourse to antiseptic agents in the treatment of acute blennorrhagia. He makes use of the three following formulæ, the preference being given to the $^1/_{20000}$ solution of bichloride of mercury :

1.—Sulphate of quinine, - - -	1 part
Glycerin, - - - - - -	25 "
Distilled water, - - - -	75 "
Acid sulphuric, - - - -	q. s. to dissolve.

The above is a one per cent. solution.

2.—Van Swieten's solution of bichloride
of mercury, - - - - 10 parts
Distilled water, - - - 190 "

The above is a very weak solution of the bichloride, 1 to 20000.

3.—Permanganate of potassium, - .05 (1 gr).
Distilled water, - - 100 (ʒiij).

The treatment is begun the day when the patient first presents himself at the hospital for treatment.—*i e.*, generally from the second to the sixth day after the commencement of the discharge. Three injections a day are made, three syringefuls at a time. The injections are tepid, and tepid fomentations are kept continuously upon the penis. The injections are made with great gentleness. When the flow begins to dry up, the number of injections is decreased, till finally but one injection a day is made. The patient is kept in the hospital one week after cessation of all treatment, and is not discharged till he is believed to be absolutely well. The following table gives the results of treatment by antiseptic injections :

Agents employed.	Cases treated.	Days of treatment.	Average duration.
Sulphate of quinine (1 per cent. solution).	10	296	29.6
Permanganate of potassium (1 per 2000 solution).	47	1281	27.25
Bichloride of mercury (1 per 20000 solution).	45	953	21.17
Total.....	102	2530	24.71

From the above, it will be seen that we have an average duration of 24.71 days, as contrasted with 27.16 where the treatment was according to the older "classic" methods. It will be seen, too, that of all the agents employed, the sublimate injections gave the best results, the average duration of the disease, when treated by this antiseptic, being 21.17.

Antiseptic injections can hardly be said to constitute a "new treatment" of acute blennorrhagia, except in the fact of their application from the very commencement of the disease, and to the exclusion of all other treatment. It is surprising to see how little pain they occasion, even during the so-called inflammatory period, and they seem to produce rapid amelioration in the intensity and nature of the discharge. According to Martin, this treatment is much less liable to be attended with complications, such as orchitis, cystitis, prostatitis, than the ordinary treatment, and he presents statistics to prove his affirmation.

During the antiseptic treatment no special care about diet seems necessary. Sometimes full doses of bromide of potassium (60 to 90 grains) prove a useful adjuvant, especially in cases of " exaggerated erethism ; " an occasional injection of 1·6 of a grain of morphine in the lumbar region may be indicated. In cases complicated with chordee, lavements or suppositories containing 15 grains of chloral sometimes give excellent results.

In cases complicated with cystitis, orchitis, or prostatitis, the microbicide injections are to be suspended to give place to emollients and sedatives.

It is worthy of remark that the results of the germicide treatment, as given by Martin, are much inferior to those claimed by some other authorities, notably Bourgeois, Chameron, and Constantin Paul.

The conclusion that patients are perfectly well when discharged from hospital in these cases deserves notice. Nothing is stated in the article to show that any unusual care is taken which would warrant such a conclusion. There is nothing to show that in these patients a thin, transparent, gleety discharge does not appear, as in other patients, a short time after their return to duty. It is not easy to determine that a given patient is actually cured of gonorrhea. The optimistic views of Dr. Martin need to be balanced by more philosophical and scientific views, such as those advanced by Drs. Bryson and Burnet in the *Journal of Cutaneous and Genito Urinary Diseases*. The authors confirm previous observation that the gonococcus of Neisser persists in some cases after all discharge has ceased, and thus acute symptoms may be lighted up by any undue excitement.—*Boston Medical and Surgical Journal*, May 2, 1889.

DOCTOR SPITZKA ON THE WHITECHAPEL MURDERS.

At a recent meeting of the Society of Jurisprudence, New York, Dr. E. C. Spitzka made some remarks on the medico-legal and historical aspects of the Whitechapel murders. (Reported in the *Journal of Nervous and Mental Diseases*, December, 1888.) He began by saying :

"It is when approaching the consideration of this repulsive subject that we appreciate the old writer's definition : 'Man is an ape without the tail, who walks on his hind legs, is gregarious, omniverous, restless, mendacious, thievish, salacious, prequacious, capable of many acts, the foe of the rest of animate creation ; the worst foe to his own kind.' "

In discussing the questions as to whether these murders and similar deeds have been committed by persons suffering from extreme sexual aberration, and secondly, whether such aberrations are necessarily due to insanity, he mentions in about as decent language as possible under the circumstances, the revolting practices of some of the Cæsars, of Gilles de Retz "who continued his terrible excesses for eight years, entrapping, outraging, vivisecting and destroying according to his own confession over nine hundred children of both sexes." In analyzing the matter of this latter monster's remarkable confession, Spitzka says : "The whole tone of it, the frequent involuntary exclamation of 'beautiful,' 'luxury' and such like terms when describing the revolting and horrible, indicate to my mind that he was nothing more nor less than a degenerated voluptuary.

Certainly he was not an impulsive lunatic, for he had assistants.

"It is improbable that he should reach the age of thirty-six before yielding to the impulse. It is more likely that his earlier excesses had led to a condition in which, as Shakespeare has it, 'desire outliveth performance;' that he exhausted all artifices to stimulate his weakened powers; and coming across the work of Suetonicus (in which are described the lives of the Cæsars) it exersised a horrible fascination over him. No one will claim that his associates in crime were insane. But the very fact that it is very difficult to conceive how two persons could be found so brutalized and callous as to do for money or interest what de Retz did in obedience to the most powerful passion—however perverted—shows how careful we must be in allowing the horrible nature of a crime to rank as a proof of insanity. From those men to whom the shriek of torture of the violated virgin is the essence of their delight and who would not silence by a single note the cry of agony over which they gloat, exposed in the *Pall Mall Gaz.*; from the country boy, who after excessive self-abuse developed a penchant for intercourse with ducks, geese and other animals, his gratification being exalted by their dying agony—there is an unbroken chain of cases, showing how the acts of Gilles de Retz and the Whitechapel murderer may evolute on a basis of voluptuous exaltation associated with sexual failure.

"Marquis de Sade was born in 1740. In 1772 he was sentenced to death in contumacium for sodomy and attempted poisoning. He evaded the death penalty by flight; but returned to France, and probably with the aid of assistants carried out a number of excesses, undiscovered, similar to the following: The strollers on one of the Parisian streets, one evening in 1777, heard groans as if from a remote apartment in a deserted house; the door having been forced, other doors were forced in turn; and in one room a nude female was found tied down on a table and pale as death from loss of blood. There were two wounds one at each bend in the elbow, as if made by a plebotomist, one in each breast and corresponding ones in the vulva. Her story was as follows: In the ordinary course of her 'profession' she had been solicited by the Marquis, who invited her to sup with him and his associates. After the supper she was tied down, assured that only a little blood would be drawn, and that a surgeon, at least one who used surgical instruments, had made the wounds in question. As soon as the blood flowed freely he threw himself on the victim. She however, alarmed, cried out, and the Marquis and his accomplices fled on hearing the doors forced. Otherwise it is probable that the wounds would have been staunched and the victim silenced by the means usually effective in her class. He was arrested, tried, convicted and imprisoned in the Bastile. From here he was transferred to the asylum at Charenton for alleged insanity. In 1790 he regained his liberty and published several prominent works. It was his attempt to issue a collected edition on these works which led Napoleon I to order his rearrest and confinement in Charenton where he died, leaving several posthumous manuscripts of a like character.

In his case neither periodical impulses, epileptiform nor vertiginous existed. His perversion ran like a red thread through his entire mental organization. Yet I believe that a consideration of the case of the Roman emperors, whose example had so marked an effect on de Retz, Sade's prototype, will show that unlimited indulgence and absence of responsibility are competent to make sexual monstors out of mere volupturies. * * * The existence of neurotic taint in the family of the Cæsars does not prove that their sexual aberrations were necessarily due to insanity. It shows that they are more likely to assume certain guises in the insane than in the sane. Tiberus was not a lunatic nor an epileptic and his excesses more nearly resemble those of de Retz than those of Caligula and Domitian. As I hinted before, example, opportunity and license operating on a mind not meeting temptation at the hands of hordes of willing purveyors, will sink into loathsome luxuriousness even when not insane.

"To come down to the Whitechapel assassin, there are very few cases in the literature of the subject that nearly approximate his case. None are exactly like it. Long series of murders on women, done in the same manner and committed evidently from similar motives are recorded, but they all were committed in comparatively deserted localities. Only one was committed after the murderer knew that the hue and cry had been raised and skillful measures adopted for his capture. At Gainesville, near Austin, Texas, the murders, terribly similar in detail, were committed in 1887. The first blow was with an ax, and afterwards the bodies so mutilated that they fell apart on being lifted up. The killing was uniformly done in bed, the victim was as a rule dragged into the yard and then hacked to pieces. Most of those destroyed were colored servants. In his tenth case he failed to complete his task, the victim escaping with her life. The perpetrator has not yet been discovered.

"If the inscription on the window shutter, stating that he had twenty to kill. and would then surrender himself, 'Jack the Ripper,' be really the writing and signature of the Whitechapel Assassin, it may put an entirely different aspect on the case. If it be a genuine expression of intention it is impossible to account for it on the theory of impulsive, periodical or epileptic insanity. It is not inconsistent with sexual perversion that he might have written this to mislead. Indeed it would not surprise me if this person were an acquaintance of an author of eminence, unbosomed himself to him, and thus utilized in a sensational tale. It would not be the first time that a subject of sexual perversion has entered the lists as a writer, and no artifice that ingenuity could devise or industry execute would be too cunning for one of this class. I look upon the revelation of his identity with the highest degree of curiosity, and I am prepared to learn that, like the Texas and

Westphalian assassin, he may discontinue his work and remain forever unknown. Such a mind is not immune to the influence of fear and the necessity of caution, and as regards the last phase in the history of the Texas and Westphalian assassin it may remain an unsolved alternative between the latency of the impulse and the suicide of the assassin.

"I do not believe that the ten Whitechapel murders are the only acts of the kind of which the unknown has been guilty. Either he has performed similar acts on the living in deserted localities, when the cunning he since exhibited so manifestly would aid him in obliterating every trace of his deed, or he has served an apprenticeship on the dead body, be he butcher, medical man or amateur. It is not easy to remove the human uterus without a fair knowledge of pelvic topography, and he who endeavors to expose and remove that organ on the strength of an experience acquired among the lower animals need well be a good homologist.

"Finally I would suggest that not the least probable theory is that the same hand that committed the Whitechapel murders committed the Texas murders. We can well picture the man to ourselves: of Herculean strength, of great bodily agility, a brutal jaw, a strange, weird expression of the eyes, a man who has contracted no healthy friendships, who in his own heart is isolated from the rest of the world, as the rest of mankind are repelled by him."

The English medical and secular journals have been strongly censured for attributing the Whitechapel murders to an American. Undoubtedly they did this on absurd grounds and in a cockney spirit; but to any one familiar with the Texas homicides of a year ago, the theory that both acts were committed by one and the same person does not seem unreasonable. At the last meeting I noticed among the audience two men who were undoubtedly cases of sexual perversion, who came to hear Mr. Abbott's paper; and there have been stranger freaks in history than would be the fact of the Whitechapel murderer sitting among us at this very meeting.

We must not forget, in estimating the true nature of the murderous impulse, that among animals such impulses are often associated with sexual life. The female mantis religiosa devours the head-piece of her mate, while the abdominal segment (apparently undisturbed) completes the marital act. Certain female spiders devour their mates postcoiter. Again the gorilla—according to evolutionist, a near relative of our species—when he has disabled a foe, delights in tearing out his entrails and revelling in massacre. In the sacking of cities, infuriated soldiers have frequently been guilty of combined acts of butchery and rape. The wild beast, as stated at the opening of this article, is slumbering in us all. It is not always necessary to invoke insanity to explain its awakening.

Petroleum Soap for the Itch.—The following is reccommended by Dr. H. Emery, of Paris, in the *Revue gen de Clin. et de Ther.*, May 16, 1889, as the most efficacious in obstinate cases of itch:

℞ Petroleum	50	parts.
White wax	40	"
Alcohol	50	"
Soap	100	"

—M.

Doctor: "Take a bath, it will do you good."
Patient: "How do you take it, Doctor?"

Patient: "When can I speak to the doctor alone?"
Landlady: "Come at his office hours, between two and three—he is always alone then."

"I don't see how you can keep such a cur about you?"

"Why, that dog has saved my life."

"How was that? Did he rescue you from drowning or from a band of robbers?"

"Neither. I was sick unto death once and that dog staid by my bed and wouldn't let the doctor get near me."

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service.

June 13 to July 20, 1889.

Kallock, P. C., Passed Surgeon, granted leave of absence for thirty days, July 15, 1889.

Pettus, W. J., Assistant Surgeon, when relieved to proceed to Marine Hospital, Boston, Mass., for duty, July 18, 1889.

Woodward, P. M., Assistant Surgeon, granted leave of absence for thirty days, July 15, 1889.

Vaughan, G. T., Assistant Surgeon, relieved from duty at Boston, Mass., ordered to Norfolk, Va., July 18, 1889.

Stoner, J. B., Assistant Surgeon, granted leave of absence for twenty-five days, July 15. 1889.

Geddings, H. D., Assistant Surgeon, relieved from duty at Baltimore, Md.; ordered to Key West Quarantine Station, July 18, 1889.

Wertenbaker, C. P., Assistant Surgeon, relieved from duty at Norfolk, ordered to Galveston, Texas, July 18, 1889.

Groenevelt, J. T., commissioned as Assistant Surgeon, July 11, 1889; ordered to Gulf Quarantine Station for temporary duty, July 20. 1889.

ORIGINAL ARTICLES.

REFLEX NERVOUS DISTURBANCE FROM SEXUAL EXCESSES.

BY F. A. MORRISON, M.D., INDIANAPOLIS, IND.

In this day, when almost all of the nervous disturbances to which women are subject are referred to their sexual organs, it seems strange that analogy has not led to a closer study of the male genitals under like circumstances. As a striking illustration of the intimate relation of the sexual, to the other functions of the body, together with certain difficulties in the way of diagnosis, the following case presents some points of great interest:

E. P., printer, æt. 27 years, was admitted to St. Vincent's Hospital under my care, May 14, 1889, with the following history as given by his brother, a man of unusual intelligence: The patient had been entirely well until two weeks before the date of admission. One day while at work at his case, he was seized with a fit of tembling, which compelled him to go home. The same night his brother, hearing peculiar sounds, went to his bed room and found him lying in a convulsion on the floor. Medical aid was summoned, but in spite of everything the spasms continued to increase in force and frequency daily, except while he was completely under the influence of narcotics. Finally, as a result of the unfavorable prognosis, which indicated an early death, as well as the varying diagnosis of hydro phobia, tetanus and epilepsy, he was brought to the city and placed in the hospital.

My first visit showed me a man apparently much younger than his real age, evidently run-down in health, with a nervous, restless manner and a total disinclination or inability to fix his eyes upon his questioner. Pulse, respiration and temperature normal; tongue red and bowels constipated. He complained of dull frontal headache, and pain in the bowels, and further remarked that his eyesight was impaired for near objects. The action of the iris was peculiar, one moment the pupils were greatly contracted and the next widely dilated. This dilatation became excessive when the abdomen was in any degree pressed upon, and at the same time, symptoms of impending convulsions appeared. Urine of proper amount, color and specific gravity—nothing abnormal except considerable deposit of crystals of oxalate of lime as shown by the microscope. After instillation of a solution of sulphate of atropia, an opthalmoscopic examination was attempted. No sooner had the light been flashed upon the retina than he complained of peculiar sensations about the head and passed into a hypnotic state, regaining control of himself in obedience to discontinuance of the operation and sharp commands to get up and walk around. He had no convulsions for the next few days, then the nurse in charge reported that he suffered once or twice daily, always giving notice by ringing a small call bell that had been placed in his room. While passing through the institution one morning, I was attracted by the noise of the bell and entering the room found him lying face downward upon the floor, forehead resting upon his hands and head pushed between the wall and radiator. Left to himself, he whirled speedily upon his back and assumed a position of opisthotonus, while the hands clutched nervously at the throat and were then revolved slowly before the eyes. No tongue biting or frothing at the mouth. Eyes tightly shut and resisting all attempts to separate the lids. Pressure on the supra-orbital notches and over the stomach brought forth lively expressions of pain and endeavors to escape from the source of annoyance. So many movements with a definite purpose in view were executed, that I speedily came to the conclusion that there was no unconsciousness and that the patient was in a measure shamming and so expressed myself loudly in his hearing, afterward privately cautioning the attendants not to repeat any of the conversation to him.

Next day he complained bitterly to me of what I had said concerning him while in the convulsion, thus completely proving my previous conclusion.

He was then informed in the plainest possible manner of the nature of his trouble, and the direct question as to length of time he had been masturbating was put. After some ill assumed indignation he made a complete confession. He was immediately placed upon the bromides, his bowels were moved once a day and in lieu of gymnastic exercise, he was directed to do manual labor about the institution. In order to stimulate his determination to leave off the vice, cantharidal collodion was freely applied to the penis and the resulting blisters kept sore by irritating ointments for sometime.

After three weeks this plan was superceded by tonics combined with faradization, with the effect of producing a complete cure.

The case just cited presented many difficulties in diagnosis and the key to the whole matter lay in deciding whether the convulsions were real or assumed—which was accomplished by attention to three points, viz: Abence of self-injury, sensibility to pain and remembrance of words spoken during the attack. Certain obscure or painful nervous affections of the male in the absence of appreciable cause should direct attention to the sexual organs. Of these in my experience, a restless eye, slight dilatation of the pupil and weakness of the cillary muscle, in the absence of errors of refraction, are good grounds for suspecting the subject to be guilty of self-abuse, if single ; or sexual excess if married. From the nature of the complaint, it is often impossible, nor is it advisable at times to get a confession from the patient. This is the less to be regretted as we have in the urethral sound an instrument of diagnostic value not to be overrated.

If we find hyperesthesia of the prostatic portion of

the urethra, the presumption is that the patient is now, or has been addicted to masturbation or sexual excesses. This amounts, in my mind, to almost a certainty if the ocular symptoms above mentioned are super-added. Just what amount of pain on passage of the sound is necessary to constitute hyperesthesia is a matter to be left to the experience and judgment of the physician—always recollecting that this portion of the canal is more sensitive than the remainder. My plan has been to consider it hyperesthetic if the pain occasioned by the passage of the instrument radiated into the rectum, thighs or perineum, or led to active efforts of expulsion on the part of the urethra.

THE HOT-AIR TREATMENT OF CONSUMPTION.

BY B. F. WILSON, M.D., SLATER, MO.

The theory advanced by Dr. Weigert in favor of the hot air treatment for the cure of consumption and tuberculosis by the destruction of the pathogenic microbe, whose habitat is in the respiratory passages through the agency of a lethal temperature, certainly rests on no scientific foundation, but doubtless, for a term will prove attractive to the routinest and the instrument maker, as in the Bergeon treatment. At the outset, the author of this system of therapeusis demands that we set aside all known chemical and physical laws in order to adopt his method. It is well, occasionally to revert to first principles lest we drift away too far from ancient landmarks.

Chemistry teaches that 212° F. is the boiling temperature, which is destructive alike to all organic tissue, yet Weigert would have us believe that a temperature much above even 300° F. can be inhaled, not only with impunity, but with benign and curative effects. Air with a temperature of 300° F. is immensely rarified and is destitute of moisture, and in this state practically an imponderable body, while the residual air or intra-pulmonary air is loaded with watery vapor greatly increasing its density, and it is therefore an approach to a ponderable body. Hence the purely physical conditions would alone prevent Weigert's gas, owing to its imponderability, from rushing into the lungs and displacing the more ponderable, dense and moist intra pulmonary air. But this is not all. It is well known that a man whose normal temperature is 98½° F. can remain for quite a time in a dry hot-air furnace whose temperature is even above 300° F., but why this immunity from a temperature so lethal? Obviously the animal economy, in this heated medium, soon looses all the fluid or watery elements compatible with life, as is evidenced in the shrunken tissues, and demonstrated by the great loss of weight in the experiment.

The fluids of the body render nil the otherwise desiccating effects of this preternatural thermal elevation, first by rapid evaporation at the surface of the body, but for which the integument and subjacent tissues would soon be reduced to a crisp—and, concomitantly, the air of the lungs, supersaturated with watery vapor, rushes out to cool, condense and saturate, by diffusion, the dry, hot air that is being inspired as a specific therapeutic agent. In this simple way nature shields herself from incineration or partial cremation. The central fact, the essential feature, of this tolerance of such intense calorific states by the body, is due to the bedewing of the surface of the body with moisture withdrawn from the tissues, and when this supply fails, then vitality would succumb to the destructive chemical agency of the hot air, and while the tissues at large are thus summoned to succor and protect the body-case by surrendering up their fluidity or watery element, the lungs successfully resist desiccation and coagulation of their tissue in a similar manner to that of the skin, with the additional safeguards they have by reason of the mechanism of respiration, the greater moisture, density and specific gravity of the residual or intra-pulmonary air, and like the skin, on each respiration there is an exaggerated levy made upon the tissues at large for their watery element, which not only protects the respiratory tissue with its moisture, but also, by reason of the greater specific gravity of the intra-pulmonary air, the entrance of the hot rarified air is prevented until it is cooled and condensed, till equilibrium as to moisture and temperature obtains between ingoing and its outgoing air; and this equilibrium does obtain, both as to moisture and temperature, as the rarified, inponderable air could not displace the more ponderable intra-pulmonary air and thus gain access to the air vesicles. The hot air inspired is further prevented from doing organic injury to the pulmonary tissue, because a very small portion of the air contained in the lungs is changed at each respiration, most physiologists estimating it at one-tenth—hence the adequacy of the lungs to successfully ward off injury arising from hot dry air (whether it be in the furnace of glass blowing works or directed or misdirected by therapeutic effort) by reason of the resources of the lungs in the watery element of the body and the smallness of the interchange at each respiration, thus permitting the ready cooling, condensation and conversion of the hot and physiologically irrespirable air into proper condition to meet the requirements of normal respiration—which means that if the inspired air be below the body-heat, it is warmed in its passage to the lungs to blood-heat, 98½° F.; and if the inspired air be above the body-heat, it is cooled and condensed till it reaches blood-heat. Hence it neither burns nor injures the lung tissue, nor can it, on the other hand, be hot enough to kill microbes. Thus it is, that chemical and physical laws oppose effectual barriers to the otherwise death dealing process, therapeutic incineration, partial cremation or hot-air treatment.

SHOULDER PRESENTATION THIRTEEN TIMES IN THE SAME WOMAN.—This remarkable score was kept and reported by M. Eustache of Lille, France.

TRANSLATION.

HEPATIC INSUFFICIENCY.

Lecture delivered at the Hopital de la Pitie by Dr. M. Lancereaux.

Translated by Dr. Benno von Steinmetz.

The knowledge of the physiological conditions of death should be thoroughly mastered by every physician, because he must try to prevent this fatal termination, and yet it is one of those points to which little attention is paid. In one of my former lectures I had the opportunity to present to you several patients, exhibiting similar symptoms, who have since died of that functional disorder of the liver, hepatic insufficiency. If there is an organ in the body, excluding the lungs, brain and heart, which by the suppression of its function, can cause death, it is surely the liver. It is of hepatic insufficiency that I will lecture to-day.

We first study the organ in itself, then we try to establish pathogenetic conditions and finally the therapeutic indications. We understand by hepatic insufficiency, a complex of symptoms, caused by a simple functional disturbance, owing generally to alterations in the structure of the gland which causes the transient or prolonged suppression of its functions. The term "alcoholic" often employed as a synonym, expresses but one part of this complex of symptoms, that resulting from the suppression of the bile ; but as nearly all troubles following the obstruction of the bile ducts have been called by that name, without differentiation, and as this obstruction is often followed by the destruction of the hepatic cells, the result is to credit to achol most of the phenomena which are really due to hepatic insufficiency. This latter disease is occasionally caused by a simple functional disturbance, but more often in the course of primary or secondary changes in the liver itself, the symptoms, characteristic of this disease, show themselves. The following description will suffice to give one an idea of the disease : The patient, emaciated or hectic, often having ascites and icterus, feels fatigued, broken down and restless ; he is irritable, feels oppressed in walking as well as resting and complains of a suffocating sensation ; insommia ensues and is combined with numbness and torpidity and he begins to be delirious. This is aggravated at night ; there are partial convulsions of the upper extremities with contraction of the jaw ; incontinence of urine and feces. This period of excitation is generally followed by a period of depression, characterized by complete exhaustion, somnolence and coma. At the same time the tongue is heavily coated, bitter and dry ; retching and slight vomiting of a greenish or biliary color ensues, resembling the vomiting in uremia. There is very little thirst and the appetite is completely abolished ; the evacuations, seldom normal, are often diarrhetic and fetid, which in turn is followed by constipation. The volume of the liver diminshes and the spleen increases. The urine is diminished in quantity, very acid, highly colored, contains urates in abundance and often bile and albumen.

The respiration is short, the expiration rapid, followed by a long pause, (Cheyne-Stokes respiration). If icterus is present the patient is tormented by unbearable itching. The pulse is frequent and irregular, from 80 to 120 per minute. The heart palpitates, the extremities are cold and clammy and the temperature often falls below normal. To these symptoms are often added hemorrhages, epistaxis, hemoptysis, hematemesis, extravasation of blood into the cellular tissue, and occasionally hematuria. The face has an anxious and pinched appearence ; the skin feels dry and scaly, but is seldom the seat of eruptions.

These different symptoms, which in the aggregate, may also be termed the typhoid state, are developed rapidly, in the course of from two to ten days, and the termination in most cases is death.

This complex of symptoms has great resemblence to those of uremia ; we have in both diseases delirium, oppression, vomiting, coma and convulsions ; but in uremia the delirium takes different forms, the vomiting is more isolated and is not lost sight of in the midst of the general symptoms, as it is in hepatic insufficiency. Uremia is more changeable. Hepatic insufficiency also resembles urinary cachexia.

What are the pathogenic conditions giving rise to this syndrome of symptoms?

We may say, in a general way of all diseases of the liver, that they attack the hepatic cells directly, or that the modification is effected consecutively to other disorders.

To the first category belong grave icterus, yellow fever, phosphorus or arsenic poisoning ; to the second class belong the cirrhoses, primary epithelioma of the liver, icterus by retention of the bile, etc.; in all these cases, hepatic insufficiency does not appear immediately, but shows itself in the course of a longer or shorter period, from a few days to many months, and even longer, according to the rapidity of extension of the morbid process. In all there is a common anatomical change, the primary or secondary alteration of the liver cell. The change in the hepatic cell is the condition necessary to produce the disease, hepatic insufficiency.

The examination of the foregoing facts brings us to the conclusion that hepatic insufficiency is subordinate to certain material disorders, which may be purely functional, of the glandular cell of the liver. Now, by what mechanism are these disorders produced? Let us first see what function the hepatic cell performs. This element secretes the bile, manufactures glycogen which contributes to the maintenance of the body heat, the blood and the tissues. Glycogen, according to the recent researches of Roger, seems also to serve in carrying on the third function of the liver, that of changing albuminoids to form urea and other products eliminated from the body by the kidneys. This shows the co-relations existing between the liver and the kidneys, each of which organs possesses a portal system and eliminative functions.

Among the many functions, which is the one by whose suppression the clinical tableau of hepatic insufficiency is produced? Is it the biliary function?

The bile is a recrementitious product, which has antiseptic properties due to choleic acid, but which is also a poisonous liquid. The researches of Bouchard show that the urine elmininates in a certain time half enough poisonous matter to kill a man; for the same time the bile eliminates enough poisonous material to kill three men ; consequently the toxicity of the bile is six times that of the urine.

The same author has demonstrated that enough bile is fabricated in eight hours in a man to kill him by the hepatic secretion alone.

In the physiological state, we are protected against this source of intoxication through the precipitation in the intestines of the two active principles of the bile, bilirubin and salts. The bilirubin is precipitated as soon as it comes in contact with the chyme, which renders it insoluble and prevents its reabsorption. The acids of the biliary salts, which are very unstable, are decomposed, forming choleic acid, glycocole, taurine and an insoluble element, dyslysine. Sodium, the base of these salts, is inoffensive and if the bile is a recrementitious liquid, i. e., partially reabsorbable, the resorption does not include the offensive material, and if some of the poisonous material should be reabsorbed, it would be arrested by the liver. When, at the beginning or in the course of an affection, the hepatic cell is attacked or changed, the biliary function of the same is suppressed or impeded. In grave icterus, the resulting death can not be attributed to intoxication by bile, because the biliary function of the liver is suppressed, as also occasionally happens in certain cases of jaundice by retention or catarrhal icterus, precisely at the moment when danger to life begins, that is at the instant when the symptoms of hepatic insufficiency begin to manifest themselves. We are therefore obliged to explain the phenomena of hepatic insufficiency not by the intoxica tion through a normal product, the bile, but by the intoxication through abnormal poisons, which are generated from intestinal resorption, or the retention of material destined to be eliminated by the biliary liquid, or through the suppression of the formation of bile.

If icterus be present, the patient is protected against intoxication by the fixation of the bilirubin in the blood and connective tissues, from which it is eliminated with the salts of the urine.

Among the symptoms due to the suppression of the cellular functions of the liver, we find the diminution of the quality of urine. Hepatic insufficiency is then of necessity followed after a time by insufficiency of the renal emunctory. Urine loaded with albumen, leucine and tyrosine, etc., becomes smaller in amount as the liver gives passage to matters that it should elaborate, thereby diminishing its fabrication of urea, long looked upon as injurious, but now regarded as beneficial and diuretic. In considering the physiological pathology of the accidents of hepatic insufficiency, uremia then must be numbered as one of its factors. We believe, with Bouchard, that the sequence of accidents in affections of the liver with retention of bile, in general, is as follows: Biliary intoxication (cholemia); alteration of the hepatic cells and suppression of their functions; modification of the urinary secretion bordering on renal insufficiency; then auto intoxication, due to the formation of toxic products of an animal nature and *by uremia*, that is to say, by the non elimination of normal toxic products which the urine habitually conveys away.

It is not surprising, therefore, that the clinical picture presented by hepatic insufficiency is stamped with so many of the characteristics of uremia as are noted above. And we may readily understand why it is that in grave lesions of the liver, renal impermeability is especially dangerous, and on the other hand, that improvement of the patient coincides with increase of urea in the urine, as you have observed many times in our service.

The biliary function of the liver has been known from time immemorial and it is easily conceivable that the suppression of this function has been burdened with the blame of all the fatal terminations of diseases of the liver. Aside from the hematopoietic, thermic and uropoietic functions of the liver, we have yet to consider the glycogenic function, which does not appear to be the most important, and still another function which has recently been studied and of which the following account will give an idea: Heger, in 1873, and Schiff, later on, demonstrated that the liver retains a part of the alkaloids which pass through it. According to Schiff and his follower, Lautenbach, the liver transforms or destroys the alkaloids; according to Heger and his follower, Jacques, it arrests and stores them up. The recent experiments of Roger tend to establish the fact that the liver arrests and retains part of the alkaloids which are carried to it through the blood of the portal vein; this explains the difference in the action of vegetable alkaloids administered hypodermatically or by the mouth. We know, for instance, from Lussana that curara is mortal if injected under the skin, and is almost without effect if it is introduced into the system by the digestive tract. Experiments show that it is the bile which contains the curarine, and that it is not eliminated by the urine.

The liver acts in this way as a safeguard, preserving the organism from the action of toxic agents introduced by the stomach, and, according to Bouchard, it also protects the system against any deleterious substance which may be formed in the intestines themselves. The kidneys in these cases play also an incontestable and important part, especially if the hepatic functions are suppressed. But, if the healthy function of the kidneys is the greatest safeguard for patients with disease of the liver, we can say with equal truth, that the healthy function of the liver plays an equally important role in diseases of the kidneys.

The diagnosis of hepatic insufficiency is comparitive-

ly easy, the redness and dryness of the tongue, the diminution of the appetite, the general loss of strength, the delirium, etc., are signs which do not allow of any mistake. It is not so with the acute febrile diseases where the symptoms of hepatic insufficiency are often con founded with those of the general disorder. The phys ician who follows the course of these fevers cannot pay too much attention to the action of the liver and kidneys, and, as soon as he percieves any change in the course of the disease, he should try to inform himself whether this deviation is due to some disorder of the one or the other, so as to be able to act promptly. The knowledge of the clinical tableau traced above will, it is hoped, bring to him the solution of the problem.

The prognosis of hepatic insufficiency is very grave in every case, more so by far than in renal insufficiency, because the functions of the liver are more difficult to substitute than those of the urinary organs. The intestines and mainly the kidneys are the organs called upon to act as such alternates. The employment of diuretics and purgatives, cholagogues, salines and the mercurial salts is naturally indicated; heroic doses should be given to obtain the desired result and prolong the life of the patient. Baths and cutaneous friction help to establish the function of the skin. Inhalations of oxygen help the general oxidation and aid the combustion of the toxic substances of the organism. Al kalies, bromides and iodide of sodium are also indicated. Bouchard advocates the disinfection of the alimentary canal by naphthol and salicylate of bismuth. The diet should be exclusively milk, either pure or diluted with alkaline waters; whisky or brandy are also of value in the depressed state.—*L' Union Medicale.*

A New Symptom of Pericarditis.—In some cases the diagnosis of effusion into the pericardium is difficult; and a symptom, first noticed by Bamberger, is said to be constantly present, and aids materially in arriving at a correct conclusion. Puis, in the *Wiener Med. Woch.*, early this year, has again attracted attention to the point. By percussion of the patient in a sitting position, or when lying on the right side, there is a muffled tympanitic resonance or diminished resonance over the left side of the thorax behind, extending downward from the angle of the scapula; and at the place of greatest loss of resonance there is a distinct bronchial breathing and bronchophony, with increased vocal fremitus. If the patient is made to bend forward, a portion of the dulness completely disappears, another portion becomes tympanitic, and no bronchial breathing is heard. This change is more marked still if the patient assumes the knee-elbow position. The physical signs observed are ascribed to compression of the lower lobe of the left lung by the fluid in the pericardium, and are found chiefly in young adults with chests which are elongated or narrowed antero-posteriorly. The presence of pneumonia or pleuritis is contra-indicated by the alteration of the physical signs when the position of the patient is changed.—*Brit. Med. Jour.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,

EDITOR.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, AUGUST 3, 1889.

The Pathogeny of Chloral Eruption.

In a valuable paper on Chloral Eruption, by Dr. Aviragnet, in the *Bulletin Medical*, the question of the pathogeny of the affection is discussed in an interesting and original manner. We are all well acquainted with the abstract fact that chloral causes an abundant eruption at times, but little that is satisfactory has been said as to just how it is produced.

The author first refers to the fact that the local application of chloral causes an irritation, which may go on to vesication, provided its use be continued long enough. When taken internally, it produces well-recognized phenomena, sleep, anesthesia and muscular and nervous relaxation. There is, moreover, a depressive effect on the heart and respiratory centers; it lowers temperature and augments the urinary secretion. But its principal action is that which it exerts on the sympathetic and vaso motor system. It paralyzes the sphincter centers. Vulpian has demonstrated plainly its vaso-dilating action. Chloral tends to produce, then, paralysis of the vaso-constrictors and excitation of the vaso-dilators.

Excitability of the nervous system is met with in persons affected with chronic or acute nervous diseases; it is easy to comprehend how, in such conditions, chloral, even in small doses, given day after day, will eventuate in paralysis of the vaso constrictors, or, to the same end, excitation of the vaso-dilators. It is in such cases that the chloral eruption presents itself. It is irrational to suppose that a relation of cause and effect exists between them? That the rash is an evidence of angio-neurosis, caused by the paralysis of the vaso-constrictors? Faisans has demonstrated the vaso-motor origin of purpura and is not that origin invoked to explain most erythemata? Are not the cutaneous ev-

idences of scarlatina or typhoid fever, etc., due to irritation of the vaso-motor center by the specific virus? Do not the alterations of sensibility, which are observed in certain cases, the symmetry of the eruption and its development at certain points only, in benign cases, plead in favor of the central origin of the eruption?

The author has observed cases in which apparently a cumulative effect of the drug was the cause of the eruption.

The Test of Electrolysis for the Radical Cure of Stricture.

We are sorry to have to announce that the project of testing the value of electrolysis in the treatment of urethral stricture by Dr. Newman, under the supervision of a committee selected for the purpose, has fallen through. Dr. Newman has declined to accept the challenge offered by Drs. Brewer and W. K. Otis, of New York, on the grounds that he would be unable to obtain fair play in New York; that he objects to the use of dispensary patients; and that he objects to either party interested furnishing the patients. He has offered a counter-proposition that the trial take place in Philadelphia, that the patients be furnished by some disinterested party in that city, and that the committee consist of one member from New York, one from Philadelphia and one from Baltimore. This proposition has in turn been rejected by the gentlemen named above, not only "on account of the imputation on the profession an acceptance would imply, but also on account of the practical impossibility of making the constant trips to and fro which such a trial would necessitate."

A Non-Poisonous Sublimate Solution.

M. Edward Salomon presented to the Academie des Sciences and l'Academie de Medecine (*Le Concours Med.*) formulæ for the preparation of bichloride solution, which he gives assurance is stable and safe, even if swallowed accidentally.

Chloride of sodium added in quantities equal to the bichloride insures the stability and permanent clearness of the solution; its innocousness is attained in the following way: The addition of chloride of sodium, sulphate of cadmium or sulphate of copper communicates to the solution active emetic properties, which prevent their remaining in the stomach, if through inadvertence they be swallowed. Emesis obtained in this way seems to be even more prompt and effectual than when the irritant emetics are given alone.

M. Salomon has been led to choose the sulphates of copper and cadmium because of their superior power as emetics. The copper salt is from three to five times as powerful an emetic as sulphate of zinc, and the sulphate of cadmium ten times as powerful. But the high price of the latter is an important objection.

The author has found that, to assure the innocuousness of the solution, it suffices to so dose the emetics that they shall begin to act the moment that the sublimate overreaches its therapeutic boundaries. On adding 5 Gm. (75 gr.) of tartaric or hydrochloric acid to the litre (quart), the emetic properties of the solution are not sensibly diminished. Based on these considerations, the following formulæ are presented:

A.

		PARTS.
℞	Aq. dest.,	1000.00
	Sod. chloridi,	80.00
	Cadmii sulph.,	0.50
	Hydrarg. bichlor.,	0.50

B.

℞	Aq. dest.,	1000.00
	Sod. chloridi,	100.00
	Cupri sulph.,	1.00
	Hydrarg. bichlor.,	0.50
	Ac. tartaric.,	5.00

C.

℞	Aq. dest.,	1000.00
	Sod. chlor.,	1.00
	Cupri sulph.,	2.00
	Hydrarg. bichlor.,	1.00

To these formulæ, coloring matter, such as eosine, may be added for the purpose of making visible distinction between them and other autiseptic solutions.

The formulæ A. and B. are adapted to general toilette purposes; for an effectual and pleasant mouthwash, it is better to leave the acid out.

Formula B. appears especially designed for domestic use.

Formulæ C. is a simple preparation and inexpensive; in fact, for the sake of economy, nothing is retained in it but the quantity of chloride of sodium necessary to insure stability, and copper sulphate to give color and emetic power.

Treatment of Insomnia.

In reviewing before the Berlin Medical Society the indications and counter-indications for the use of various drugs in the treatment of insomnia, Hr. Jastrowitz in reference to paraldehyde, said that it displayed no tendency to depress the heart as does chloral, but, administered for a long time, it manifests a kinship to alcohol by a kind of chronic intoxication, approaching delirium tremens. Because of its disagreeable taste and the fact that it is eliminated by the lungs, paraldehyde is contraindicted in dyspepsia and bronchitis. It is on the contrary especially serviceable for hysterical patients (just because of its bad taste) and in pruritus accompanying icterus. It should be advised in stenotic lesions of the heart, but proscribed when there

is dilatation of the right heart, or arterio-sclerosis.

It acts well where the insomnia is from a moral cause or in excited epileptics, but its action is less favorable in states of psychical excitation and morbid terror.

Hydrate of amylene is considered by the author to be a good soporific and devoid of all danger. But it irritates the stomach. It has been recommended in typhoid fever, in heart diseases, especially where there is bronchitis (where paraldehyde is counter-indicated), and as a tranquilizer in cholelithiasis.

Sulfonal possesses the great advantage of being tasteless and odorless, which permits of its being administered unknown to recalcitrant patients. It has no influence on the heart. Its action is not prompt enough for use in acute affections, and it has no power to relieve pain.

On the other hand, it is an excellent remedy in insomnia of motor origin, for instance from chorea, and in all forms of mania. It is of advantage to give it in small calming doses during the day, with a large soporific dose at night.

The prolonged use of sulfonal produces a peculiar feebleness of the extremities; for that reason it should be discontinued from time to time.

With reference to their convenience and safety of administration, the author ranges the various hypnotics in the following order: Sulfonal, paraldehyde, hydrate of amylene, chloral and morphine. As to strength or intensity of soporific effect, thus: Chloral, sulfonal, hydrate of amylene, paraldehyde, morphine.

It will be observed, then, that sulfonal is the least dangerous of all, and, at the same time, occupies the second place in soporific power.

Hysteria in the Young.

This little-recognized complaint furnished the basis for an interesting thesis by Mlle. Goldspiegel, an abstract of which appears in the *Jour. de Med. et de Chirurgie Pratiques* for July.

The author at the outset takes the stand that it is far from being rare among children, since statistics prove that a fifth of all cases of hysteria occur before the age of puberty. Any or all the usual symptoms of the disease may be manifested during the infantile period. We cite two observations related by the author. One, a girl, æt. 14 years, had been possessed of an uncontrollable desire to eat pepper for four years. Taking it in pinches, she would consume two or three pennyworths a day. Upon seeing pepper, she could not resist the temptation to eat it, and during the four years she had not allowed a single day to go by without satisfying her longing for it. At first it had caused burning of the tongue and gullet, but in a short time this wore off and she seemed to be able to eat it with impunity, excepting some tendency to anorexia to which it gave rise. There was anesthesia of the tongue and pharynx. Subjected to an appropriate regime and to the toning influence of cold douches, the patient was entirely cured.

The other patient was a boy, æt. 13 years, in whom the hysteria manifested itself principally by two symptoms, painful crises and vertigo. For about four years he had experienced pain in the end of his great toes, comparable only to that caused by an energetic felon. It recurred almost every evening. Later it attacked his legs, thighs and lumbar regions, lasting for a quarter or a half hour. During the last seven months other phenomena had been superadded; transient spells of vertigo would come over him, whatever his situation, at home or in the street; he would fall sometimes, after which he would be able to rise and continue his occupation.

Mlle. Goldspiegel thinks that the prognosis of infantile hysteria is, in general, favorable, and better than in adults, especially if the case be recognized and treated early in its career. But often to attain a cure it is absolutely necessary to separate the child from its parents. Charcot likewise insists on this emphatically.

The American Rhinological Association.

Owing to the absence of a large number of the members of the Association in Europe and other places, the annual meeting has been postponed until October 9, 10 and 11, when it will be held at the Palmer House, Chicago, Ill.

This Association was founded by Dr. Thos. F. Rumbold several years ago, and has grown to a membership little short of one hundred. Dr. Rumbold has long been prominently before the profession as an indefatigable worker in his chosen specialty, and by his original work and perseverence has helped in a great measure to bring the study of the diseases of the upper air passages into prominence. Through his efforts at the last annual meeting, held in Cincinnati, a committee was appointed to investigate the relationship of rhinal disease to insanity. We understand that this committee has been hard at work, and at the coming meeting will make a report that will be of great interest to the profession.

The profession at large are invited to attend the meeting, and all laryngologists and rhinologists are invited to identify themselves with the society by becoming members of the Association.

The Treatment of Gonorrhea by Scraping the Urethra.

Dr. Hugnet proposes in the *Annales des Maladies des Org. Genito-Urinaires*, a new procedure for the purpose of aborting gonorrhea. It is founded on the admitted fact that mere contact of antiseptics with the mucous membrane is insufficient to destroy the pathogenic microbes. This germicidal action may be rendered more complete by detaching mechanically the urethral epi-

thelium. To accomplish this, the author uses a swab of horse-hair similar to that used in cleaning test-tubes. Having anesthetized the urethra by injecting a five per cent cocaine solution, he slowly introduces the swab as he does an ordinary sound, but turning it all the time. After having traversed the penile portion of the urethra, the instrument is withdrawn and found to be covered with blood and epidermal debris.

A hot bichloride solution, 1-10,000, is next douched through the urethra, after which the same solution is injected three times a day.

M. Hugnet has tried this method in only five cases of virulent gonorrhea, each of five or six days' standing. After seven or eight days in both the discharge ceased.

Pulmonary Emboli and Recovery.

The impression is quite general that an embolus of clotted blood carried to the lungs invariably means death. That this is not so we can readily believe from the following cases related by M. Arnozan, in *Jour. de Med. de Bordeaux.*

A man having contracted, after an injury of the foot, phlebitis, which had invaded by successive attacks both lower limbs, was finally on the road to convalescence. On the evening of the first day he sat up, he was suddenly taken with a violent pain in his side, extreme dyspnea—almost to suffocation—and expectoration of clotted blood. On the following day auscultation disclosed crepitant rales at the site of the pain. The patient recovered rapidly thereafter.

Another case had also suffered from double phlebitis and was attacked in the same way the first day he left his bed. His suffering was not less intense; there was a feeling as if a rigid band were encircling the upper part of his chest, choking him in its vice-like grasp. And this notwithstanding the fact that he could breathe and the air penetrated his chest. The respiratory movements were precipitous, while those of the heart were regular and without agitation. The face was pale and cyanosed, the eyes somewhat injected. This painful scene lasted several hours, which gave opportunity for repeated auscultation, but nothing of value was discovered by it.

Sinapisms to the extremities and to the site of pain, inhalations of ether and the ingestion of some drops of the same agent at last afforded some relief and evoked sleep. Complete recovery followed, but not until presternal pain and some respiratory difficulty had endured for a considerable length of time.

Prevention of Bedsores.—In the belief that lanolin is a normal constituent of the skin, and able to prevent the entrance of destructive agents into the tissues, Prof. Rosenbach recommends that it be rubbed into a red spot denoting an impending bedsore. He has had unvarying success with it.

MEDICAL ITEMS.

Depopulation of France.—To prevent this, the Chamber of Deputies has decided that the personal and household property of the fathers and mothers of seven children shall be exempt from taxation.

Antipyrine in Headache.—In order to obtain the beneficial effects of antipyrine when taken for the relief of headache, the patient should remain quiet for at least half an hour after the administration of the dose.

Prolonged Period of Incubation of Hydrophobia.—A young man, of Carthage, Mo., died July 25, from hydrophobia, the inoculating bite having been received from a dog more than a year ago. A madstone was applied at the time.

Remarkably High Temperature.—Dr. J. W. Whitney, in the *Brooklyn Med. Jour.*, mentions a remarkable case of intermittent fever, in which the temperature would reach, every other day, the dangerous elevation of from 110° to 113½° F.

Is Mary Anderson Insane?—It is rumored that Mary Anderson, the tragedienne, "Our Mary," broken down in general and mental health, is now in a private English insane asylum. She began to show symptoms of anglomania a year or two ago.

Almost a Frankenstein.—A man with an artificial face has been attracting much attention at an English watering place. He has an artificial cheek, eye and palate, fitted by a surgeon of Bristol. He eats without the slightest difficulty, and speaks distinctly.—*Times.*

Eucalyptus in Headache.—Oil of eucalyptus, in 5m capsules, is said by Dr. Morris J. Lewis and Dr. Schweinitz, to produce almost immediate and complete relief from headaches of various origins. It appears to be most beneficial when the headache is of the congestive type.

How to Administer Chloral in Eclamptic Coma.—In view of the difficulties so frequently met with in attempting to give chloral—or, for that matter any other medicines—in coma, M. Emile Blanc, in *Lyon Medicale*, recommends that it be poured into the stomach through a stomach-tube, which, in case spasm of the jaws prevents its introduction through the mouth, is passed down through the nares.

Incompatibility of Some Antiseptics.—Never prescribe the following substances in the same solution: Corrosive sublimate and iodide of potassium; sublimate and soap; carbolic acid and iodide; carbolic acid and permanganate of potassium; iodide and soap; salicylic acid and permanganate of potassium; permanganate of potash and oil; soap and glycerine; glycerine and per-

manganate or chlorate of potash (explosive compounds). —*Jour. de Med. de Paris.*

A Home-Made Fire Extinguisher.—Take 20 pounds of common salt and 10 pounds of sal ammoniac (muriate of ammonia, to be had of any druggist), and dissolve in seven gallons of water. When dissolved it can be bottled, and kept in each room in the house, to be used in an emergency. In case of a fire occurring, one or two bottles should be immediately thrown with force into the burning place so as to break them, and the fire will certainly be extinguished.—*Med. World.*

Useful if True.—A fly always walks upward. Put a fly on a window and up he goes to the top; he can't be made to walk downward. My friend made a window screen divided in half. The upper part lapped over the lower, with an inch space between. Well, as soon as a fly would light on the screen he would proceed to travel upward, and would thus walk straight out doors. On reaching the top of the lower half he would go outside. Not being able to walk down he had no way to return to the room. By this means a room can be quickly cleared of flies, which always seek the light.—*Ex.*

A Curious Case of Hysteria.—Dr. Janet relates in the *Courier Med.* a very curious case of hysteria. At the age of twenty years, a young girl who had already presented several manifestations of hysteria, was affected with absolute dysphagia. Nourished by a tube, she soon fell off in flesh, as she rejected the aliments ingested. Dr. Janet then treated her by hypnotism, and during the periods of sleep he was enabled to make her eat, but while she was awake the dysphagia returned. The doctor then adopted the plan of leaving her nearly all the time under the influence of the hypnotic sleep. There was created in this girl a sort of double existence, waking and hypnotic sleep. This latter existence appeared to get the better of her and to substitute itself for the first personality. Since January last, this girl has been under the influence of hynosis and yet feels quite well, following her occupation as usual, and not suffering from dysphagia.

Chicago's Erratic River.—It is said to be by the beneficient forethought of Providence that large rivers generally run by large cities; it would be better for Chicago were her "river" located somewhere else. The current (when there is any such) of this highway of commerce and sewage usually runs into the Desplaines, and thence into the Illinois river; but abundant rain reverses this course, and causes it to dump its supply of filth, mire and smell directly into the bay, from which the city gets its water-supply. This has occurred lately. On July 30th, the lake was yellow with river slush, to nearly a quarter of a mile from the crib and the contamination seemed to be stealing its way to the source of water supply slowly but inevitably. The bodies of dead cats and dogs, and garbage of all kinds, were seen floating about—a disheartening prospect for sincer prohibitionists.

The daily press and the people are much agitated over the well-grounded fear of an epidemic resulting from this state of affairs.

OUR MEDICAL MUSEUM.

A Remarkable Case.

Dr. McLean relates the case (*Am. Jour. Obs.*) of a child crying in the uterus. Air had been admitted to the uterus by the admission of the hand to correct a mal-position of the head, the water having previously escaped. Dr. McLean applied the forceps, the child crying loudly during the operation, "the voice sounding as if coming from the cellar." This continued for four or five minutes, till at length the child was safely delivered. Dr. McLean states positively that the child's head was in the uterus, not in the vagina, while the crying proceeded. Mother and child did well.—*Kas. City Med. Rec.*

A Block of Wood in the Stomach.

A Mrs. Murphy died, not long since, in Birmingham, Ala., from something which had long been a standing mark of obloquy to the diagnostic skill and acumen of the profession for miles around. For two years past, she had been suffering intense pain in the epigastric region, and said she felt something growing in her stomach. Palpation discerned a hard body in the region complained of, but its nature was never revealed until an autopsy rent the veil that hid the mysterious growth.

When the stomach was opened, a rounded block of wood, weighing two pounds, was found snugly fitting the organ. Mrs. M. had been in the habit for 20 years of dipping snuff, iu which she made use of small wooden brushes. She would frequently bite off and swallow parts of these, which, by gradual accretion, had formed the mass and resulted in her death.

A Young Living Fetus.

Dr. J. L. Nascher, of New York, writes: "I was called to Mrs. N— on May 7. She was delivered of her first child January 22, 1888. After May, 1888, her menses returned regularly, the last time on November 9, 1888. A number of circumstances put it beyond doubt that conception took place after November 15. From November 15 to May 7 nothing unusual occurred in her pregnancy. On the latter date she complained of a sudden gush of water and some blood from the genitals, followed by slight pains. It was impossible to prevent miscarriage, which occurred on the 10th, at 2 a. m. The child gave a few gasps and was laid aside while the mother was attended to. In a few minutes

the child began to cry. It was at once wrapped up in cotton. A little fennel tea, the nurse says three teaspoonfuls, was given, which the child eagerly took. This was at 4 A. M. At ten o'clock the child again received three spoonfuls. At noon pinkish blood oozed from the nose. The feet and body became cold, and the child died at 12:15, living over ten hours. It measured eleven inches, and weighed less than two pounds. The eyes were closed and could not be opened. The fontanelles were very large and high, beating so fast as to appear like a tremor. The heart beat so fast that I could not count it, while the pulse was not distinguishable. Even the nails were not seen. There is no doubt that this child was of less than six months pregnancy, and as such the case may be of interest."—*Med. Record.*

Removal of a Sound From the Pelvic Cavity After Six Years.

Professor Wandl related a unique case at the meeting, February 19, 1889, of the Obstetrico-Gynecological Society of Vienna. About six and a half years ago, Mad. A., æt. 20 years, was taken in her first labor. The first stage was very long and painful. After two days' fruitless efforts, by which she was much exhausted, several physicians were summoned. Upon examination, one of them declared he could find no os uteri, that it must be closed, and in order to confirm his statement probed for a long time with his sound, but did not succeed in finding an opening. The manipulation gave pain, and a slight hemorrhage followed. The next day a living child was born.

During the first week she suffered some pain. Motion of the lower limbs gave rise to lancinating pain in the pelvis, especially upon the right side. During the next four years she endured much agony, and consulted numerous physicians without avail. For about two years she was severely afflicted with vesical tenesmus and painful micturition. The pelvic pain increased; she went in 1887 to Vienna, and was treated in vain for cysto-pyelitis. In September of that year a Vienna specialist diagnosticated the presence of a foreign body, probably a pin or a piece of a surgical needle; but although the vault of the vagina was incised, a careful search of half an hour or more revealed nothing. She went home after recovery from the operation, and again consulted many physicians, some of whom were of opinion that a foreign body was present. In August, 1888, she returned to Vienna, where she was seen for the first time by Professor Wandl. He found the uterus normal in axis, position and mobility, but the adnexa on both sides were thickened. When the finger was carried three to four centimeters (one to one and a half inches) to the right of the vaginal vault, a resistant foreign body, about two centimeters (three quarters of an inch) long and as thick as a crow's quill, was detected in the tissues at the side of the uterus. The body easily changed its place, could only be touched for an instant, and needed to be searched for often. Firm pressure against it caused much pain. The professor thought that if the womb were drawn downward the substance would be more readily found, but this did not prove to be the case, for neither through the vagina nor rectum could it be felt at all. This difficulty accounted for the varying opinions of her preceding attendants. After several examinations, Professor Wandl felt assured of the presence of a foreign body.

On August 16 its removal was attempted. Great difficulty was experienced in fixing the substance. Finally it was located by means of two curved hooks, inserted into the roof of the vagina, and pressed together so as to include the substance, and incision being made midway between the points of the hooks. More than an hour was then spent in a vain search for the foreign body. Feeling assured that it was there, he opened Douglas' cul-de-sac, succeeding in finding the body and fixing it against the intact wall of the vagina. A third incision was made perpendicular to the first, through which the substance was seized with a pair of forceps and withdrawn. It proved to be a piece of a surgical sound, one and five-tenths centimeters (one-half inch) long and two millimeters (one-tenth inch nearly) thick, which had probably been rusted, and had broken off after perforating either the vagina or the neck of the uterus. Eight days after the operation the stitches were removed, and two days later the patient left for home. After the removal of the offending substance the patient improved, and the condition of the urine became better. When last heard from in November, 1888, she was feeling very comfortable.— *Wien. Med. Blatter.*

SELECTIONS.

CAUDAL APPENDAGE IN MAN.

BY ETIENNE RABAUD, FRANCE.

A number of travelers in South Africa have testified to the existence of men of the Nyams-Nyams tribe who had tails. This may or may not be true. If such is the case, Mr. Quartrefages does not consider that the evidence to that end is very trustworthy, and rather comes to the conclusion that it has not been absolutely proved, although he believes the fact not improbable. Mr. Ecker, on the contrary, after examining this subject, thinks that the testimony of explorers is credible.

Although there may not be a race of human monkeys, it must be admitted that there are some cases of individuals having a caudal appendage. When I say "some" cases, it should be understood that Pliny and Ptolemy, and after them Marco Polo, Strup Maillett and others, speak of this anomaly, and their citations would comprise in all not 15 or 20 cases, but from 150 to 200. The well authenticated cases, however, are very few in number.

Bartels enumerates and describes 21 cases, which he

classifies as: 1. Tail connected with body. 2. Tail with free movement. 3. Cutaneous prolongation. The first includes the triangular base bone usually developed, and which extends to the anus and partially covers it. The second includes those tails that form a sort of projection at the back and which separate from the body at the sacrum. The third will not be reviewed, as it does not seem necessary, as it could take either of the other forms mentioned and still be simply a cutaneous prolongation.

The specimens already observed enable us to give a general description, which will be done, however, with due caution. The tail is conical or spherical in shape, rarely cylindrical. The end nearly always curls slightly

and sometimes is twisted like that of a pig. It is seldom more than three or four inches in length. It is sometimes covered and sometimes it is quite smooth. In the former case the hair grows in places and resembles somewhat the tail of a cow. Bartels cites and has shown a case of this kind, while Quartrefages, who lived before his time, had considered this condition as a mere legend.

Whether these tails are soft or rigid, they possess in general no movement of their own. This physical peculiarity is usually accompanied with some other defect, with *atresia ani* in particular, and almost always with general constitutional weakness. Such are the general characteristics of this class of monstrosities. Can the cause of this be discovered? Bartels considers that it is due to imperfect development, induced perhaps by inheritance from an ancestral type, while Quartrefages had not believed in this, but considered that it was caused by some abnormal development in the embryo. It is not for us to decide which theory is to be accepted. It is a curious circumstance, however, that this pecularity is found principally among the male species. I do not think that the females of the lower orders are less favored in this respect than the males. It is also peculiar that the white races appear not to be privileged in this respect. If we admit that they are a superior race to the others, then perhaps atavism would explain it. In none of the cases that have been examined, however, could vertebræ be found in the tail; while the specimen that was discussed by Virchow simply consisted of fat and muscles. Atavism would explain alone the existence of an hereditary monstrosity.

The question of heredity was, at an early day, discussed by M. De Quartrefages. He came to the conclusion that such an organ, whatever its origin might be, could be transmitted from father to son. Such a conclusion is affirmed in the cases of other monstrosities in which this is found to be the case.

The subject of the engraving is a young Moi, twelve years of age, who was taken to Saigon some time ago, where he was examined and photographed. Although so young, his tail was already nearly a foot in length. With the exception of its great length, this specimen resembled in almost every respect those that had been examined by Bartels. From the information we have been able to procure, it appears that the organ is soft and smooth and has no bony frame. Bartels cites only four cases of this kind, while its cylindrical shape appears to be very rare. We stated above, that, as a rule, this peculiarity was accompanied with other malformations, and such is found to be the case in the present instance. By examining the photograph it will be observed that a small mound or bunch is found upon each buttock. The shoulder blades seem to project abnormally, but it should be borne in mind that the subject is very thin.

The tail seems ordinary and possesses none of the pecularities described by M. De Quartrefages. He describes tails two or three inches in length, while Bartels describes them as long as five inches, but this young Moi's tail is about ten inches in length. Therefore, up to the present time this is the best specimen on record. —*Leonard's Illus. Med .Jour.*

AN INTERNATIONAL COURTESY.

The following handsome tribute appeared in the *Brit. Med. Jour.*, July 6:

Dr. Billings, the accomplished American physician, whose address at the International Medical Congress in London excited much admiration, and whose works are well known and greatly esteemed by all of us, has recently passed through London—where he has been the

guest for a few days of Dr. Ord—on his way to Oxford, to receive there the distinction of an honorary degree in law at the annual encenia. Being charged with the preparation of the forthcoming census of the United States he could make but a brief stay, and is already on his way home; otherwise we might have hoped to have seen him at our Leeds meeting.

Few could have deserved this new honor better. Dr. Billings is still a comparatively young man when the work which he has done, the position which he fills, and the honors which he has obtained are considered. He was born in Indiana in the year 1838. He took his degree of M. A. at Miami University, Ohio, and the degree of M. D. at Cincinnati, Ohio, in the year 1860. In the next year the war of secession broke out, and he entered the Federal military service. His energies and abilities at once marked him as a man to whom serious responsibilities should be entrusted. He was Medical Inspector of the Army of the Potomac in 1863 and 1864. He served with the Federal army in the field, being present at the battles of Chancellorville and Gettysburg, and subsequently took part in General Grant's fighting in Virginia. His talent for organization found ample field in the development of the great field hospitals, with their thousands of wounded and sick. After the war he and others were occnpied in creating that monumental record—the great "Medical and Surgical History of the War of the Rebellion." This work could only be accomplished with the aid of the Government, and this was dispensed to Dr. Billings and his colleagues with a generosity which has enabled them to produce a work than which none other of like magnitude, completeness and merit exists. It will prove for many years to come, as it has already proved, a treasure-house of information.

A work not less important, and perhaps more after his own heart, has been the making of the Army Medical Museum and Library at Washington. The museum is really a wonderful thing for its age, both from the quantity and quality of the material arranged in it. It has been now transferred from the old theatre building in which Lincoln was murdered to the palatial structure on the shore of the Potomac, specially built for it under Dr. Billings' direction. Here, too, the wise liberality of the Government is displayed in the completeness of the arrangements and the great expenditure they have entailed. Here, too, are many rooms where, under the supervision of its head, much good work is being accomplished.

It is, we believe, not too much to say that the library of the Army Medical Department is the largest and most complete medical library in the world. It, likewise, owes its development to the fostering care of Dr. Billings. It contains not only all the best modern books and periodicals in every language, but a collection of the classic works of every kind connected with medical knowledge of our forefathers in scientific work. Not only is it free to every one to enter, but to any part of the great United States books from this library are forwarded to any duly qualified man. The losses which this entails are stated to be infinitesimal. The crown has recently been placed on another great work fostered by Dr. Billings in the opening of the Johns Hopkins Hospital at Baltimore, built from his plans and under his supervision, an account of which he recently published. No expense has been spared in the successful attempt to make this the most perfect of modern hospitals.

Amid all this primary official work he has found time for other offices and for the production of books. He has been vice president of the National Board of Health. He had charge of the vital statistics of the tenth census, bringing out a report in two large volumes. He has also charge of the vital and mortality and social statistics of cities for the approaching census of the United States.

With all this important occupation Dr. Billings' official rank is less high than is generally supposed in this country. He is Major and Lieutenant-Colonel and Surgeon in the United States Army.

His appearances in this country have been such as to make his great power obvious. No one who heard him can readily forget his addresses at the International Congress in 1881, and at the meeting of the British Medical Association at Brighton in 1886. They were characterized by breadth of view, and by close and compact marshalling of facts—by appropriate and often humorous quotations and illustrations. They held large audiences in earnest attention from first to last.

Dr. Billings has also done great service to the whole of the medical profession by his *Index Medicus*, begun in 1879, and still in regular publication. He is now preparing a large dictionary of medical terms, in two volumes, which is to appear speedily.

With such a record, it is not to be wondered at that the University of Oxford, wherein all that Dr. Billings has done is well known to Sir Henry Acland, should have deemed him worthy of the high honor of its D.C. L., thus adding his name to those of Owen, Alison, Brodie, Milne Edwards, Van der Hoeven, Christison, Stokes, Jenner, Gross, Paget, Lister, Allen Thompson, William Farr, Simon and others to whom she has given in the last few years her highest degree. Besides this honor, he already holds the honorary degrees of LL.D. Harvard, LL.D. Edinburgh, and M.D.Munich, and he is a member of the National Academy of Sciences in America, which may be in many respects compared to our Royal Society.

How various are the ways by which scientific medicine is being advanced is plain enough to our readers. It is pleasant to think that the United States are advancing along the whole line of knowledge. It is of no small moment that Washington, but lately only a political capital, is becoming a center of scientific biological effort, through the rapidly expanding National Museum, and the labors of Dr. Billings in the War Office. The probable effects cannot easily be over estimated. The problem of the future of the United States is one

of the most interesting, as well as the newest, in the history of the human family. The modern appliances for material growth there seen have never in history been so rapidly developed, and we are glad that a firm grasp is likely to be taken by our American brethren of all of the circumstances that affect the progress of scientific, curative and preventive medicine.

SUPPRESSION OF URINE FOR SEVEN DAYS IN A CHILD TWO YEARS OLD WITHOUT SERIOUS RESULT.

BY DR. E. P. BENARDY.

Read before the Obstetrical Society of Philadelphia.

I report this case on account of its rarity. The case seems to me to be one of idiopathic suppression of urine. No assignable cause could be found, the little patient had enjoyed good health up to the time of its illness; never had measles, scarlet fever, in fact, none of the diseases of children ; had an attack of catarrhal pneumonia when eight months old. I was requested to see the little patient on the evening of August 17, 1888. He had been ailing for the past few days, disinclined to play, when well of a lively disposition. Nausea was present, and vomiting had occurred during the day ; tendency to loose stools, tongue clear, white and flabby; skin white, eyes dull, pulse quick, no fever; ordered pepsine mixture. The next day, stomach more irritable, could not retain anything, had an attack of hiccough, pulse full and quick, no fever; was informed by the mother that the child had not passed any urine since the evening of August 10, 1888; ordered xx gtts. spt. ether nit. in warm water every hour or two. The following day (August 19, 1888), condition about the same. Passed about a quarter of a teaspoonful of pure blood from the penis. Examination over region of bladder showed no indication of fluid. Ordered a warm digatalis and flaxseed poultice to be applied over region of kidneys; a bitart. potassa mixture, with infusion digitalis, internally. August 20. No improvement. Did not sleep well during the night, eyes dull, twitchy movement of the muscles of the upper and lower extremities, easily started. August 21. Twitching increased, face of waxy hue, skin hot and dry, bowels opened several times. August 22 and 23. Skin burning hot, restless, sleepless, twitching excessive, head thrown back, eyes dull and heavy, face puffed, skin waxy, lips bloodless, no pain locally, even when pressure is made. August 24. Close examination over region of bladder shows it empty; 6 dry cups over kidneys and other treatment continued. Five hours later, passed a large quantity of clear urine. August 25. All nervous symptoms abating, eyes clear, stomach less irritable, passed urine of a light yellow color. Improvement continued and patient discharged September 5, 1888.

The first thing that impresses us is the few dangerous symptoms apparent in the case. We know when complete suppression or even partial suppression of urine takes place in kidney troubles, how soon the case terminates in coma, convulsions and death. Leaving out the suppression of urine in the above case, there were no possible symptoms indicating the dangerous condition of the patient.

The literature on this subject is meager; the only work on practice which mentions the subject is the sixth edition of George B. Wood's on p. 676. On suppression of urine, he states: "By suppression of urine, as a title of a distinct affection, is here meant either a complete cessation of the secretory action of the kidneys or a diminution of it so considerably as to be clearly morbid. It is undoubtedly in general, perhaps always, a mere symptom or effect of some other disease; but instances occur in which no other affection is obvious; and in these it must in the present state of our knowledge be considered as idiopathic." On p. 677—"a rare form of suppression, occurring apparently as an idiopathic affection, was described by Sir Henry Halford, and has been occasionally met with by other practitioners. A person in apparently full health observes that he passes little or no water, but suffers from no other inconvenience than a feeling of restlessness and anxiety, with perhaps a little uneasiness in the lumbar region. After a day or two he is seized with a chill, or finding the urinary affection unabated, becomes somewhat uneasy and applies for medical advice. There is no fullness or pain over the pubes or in any part of the abdomen, no febrile action, no symptoms whatever calculated to call attention decidedly to the kidneys, except simply that of great deficiency or absence of urine. No effort on the part of the patient is of any avail in increasing the discharge, and the introduction of the catheter is followed by the escape of only a few drachms of a pale, somewhat turbid urine, usually coagulated by heat and of little density. In a short time, however, nausea comes on, and increases until vomiting results ; and this continues to be one of the most troublesome symptoms. The patient becomes dull and torpid ; the pulse, so far from being excited, is usually less frequent than in health. The urine, if not completely suppressed from the beginning, now becomes so. A urinous odor is sometimes exhaled from the surfaces. The dullness increases to drowsiness, with occasional signs of mental wandering or incoherence. Eructations and hiccoughs are not infrequent symptoms. In about four or five days the patient sinks into coma and dies afterwards in the midst or repeated convulsions.

Many of the above symptoms were well-marked in our little patient's case. Notably, the condition of the pulse, no febrile reaction, or little if any. An absence of any dangerous symptoms likely to attract attention.

ON THE CLINICAL SIGNIFICANCE OF COLORLESS OR CLAY-COLORED STOOLS UNACCOMPANIED BY JAUNDICE, AND THEIR CONNECTION WITH DISEASE OF THE PANCREAS; AND ON THE PART PLAYED BY THE PANCREAS IN ELIMINATING BILE FROM THE INTESTINES.

BY DR. T. J. WALKER.

Communicated by Sir Andrew Clark, to the Royal Medical and Chirurgical Society.

After referring to the accepted views of the significance of clay-colored stools, the author gave particulars of two cases in which, during life, a persistent symptom was the absence of color in the feces, and in which the diagnosis made of obstruction of the pancreatic duct, with a healthy condition of the bile-duct, was confirmed by the necropsy. From these cases Dr. Walker concluded, first, that the formation of hydrobilirubin, the coloring matter of the feces, depended on the mutual reaction of the bile and pancreatic fluid, under the influences met with in the intestinal tract; second, that in disease a deficiency of pancreatic fluid would, equally with a deficiency of bile, cause the pathological condition of colorless or clay-colored stools; thirdly, that since, according to the most recent physiological researches, that portion only of the colored constituents of the bile which had been converted into hydrobilirubin was excreted in the feces, while the unchanged bilirubin, bilifuscin, and biliverdin were absorbed, it followed that, if hydrobilirubin could not be produced without the aid of the pancreas, that organ must have an important role in regulating what proportion of the bile entering the intestines should be absorbed and what thrown off in the feces. Dr. Walker then pointed out that these conclusions received confirmation from the records of other published cases, that Claude Bernard recognized that the pancreas had a part, in causing the color of the feces, and that the state in which the bile pigments were found in the meconium of the fetus, while the pancreatic function was in abeyance, also accorded with these conclusions.

He further pointed out that the fact of the pancreas influencing the exertion of the bile in the feces would, if accepted, reconcile the discrepancy between the clinical observation that certain drugs produced copious bilious stools, and the physiological observation that these drugs had little or no influence on the secretion of bile by the liver, and that the same fact would explain those hitherto inexplicable cases in which, with no evidence of arrest of the bile-secreting functions of the liver, or of obstruction of its ducts, the symptom of white or clay colored stools was persistently present.

In conclusion, Dr. Walker indicated the practical importance of the views he had endeavored to establish in the treatment and diagnosis of pancreatic disease and of all forms of bilious disorders.

Dr. George Harly congratulated the author on the paper which had been read, and said that it was worthy of serious consideration. There were some points which appeared to him doubtful. If the pancreas, by not acting in its normal manner, caused the feces to be white, then we should not find such a large number of cases of the white stools as occurred when the common duct above was blocked. The action of the pancreatic juice on oils had long been known. In the case of piebald stools, the explanation was that the first part of the fecal mass was passed when the gall-duct was blocked; then the calculus became dislodged, and so the second part or the feces became normal in color. In both cases the pancreas was acting. In meconium, if no pancreatic juice passed, the feces should be pale, but he had never heard of white meconium unless there was congenital occlusion of the bile-duct. All these facts militated against the theory advanced in the paper. He had carefully searched for disease of the pancreas because the pancreatic and common bile-ducts opened so near one another that a stone which blocked one duct might easily occlude the other; further, he urged that if the pancreatic juice played such an important role we should not so often have clay-colored stools when the post-mortem examination revealed no disease of the pancreas. He asked what the condition of the urine was in these cases, and impressed on the society the fact that occasionally cases of white bile were met with.

Dr. Thudichum complained that the paper was opposed to the fact of physiological chemistry. How could it be proved that the pancreas had physiologically any part in eliminating bile from the intestine? He denied that bile had ever been found in the feces; in the dog only a small quantity of choleic acid had been found, for the bile disappeared entirely. Pale-colored feces were met with after a dose of opium and in children who had just passed through an epileptic seizure. He traversed the point that "that portion only of the colored constituents of the bile which had been converted into hydrobilirubin was excreted in the feces;" for hydrobilirubin was made from bilirubin in ox gallstones by dissolving them in caustic potash and then treating them with sodium amalgam. Now, human bile was a mixture of substances out of which no definite substance could be got. He was asked to believe that human bile contained bilirubin, bilifuscin, and biliverdin, whereas it contained bilifuscin alone and nothing else. The statement that calomel produced bilious stools was worthless, for the green color was formed by a sulphide of suboxide of mercury. Blood never contained bile, or, at least, bile could never be detected in the blood.

Dr. Sinclair Thomson related two cases of gentlemen who had for twenty years been troubled by colorless stools; both had been in Idia; they had at times been under treatment for malaria, and he thought that malarial poison probably played some part in the production of clay-colored feces.

Dr. Pye-Smith considered the paper of interest and value, which adverse criticism did not detract from. He advanced, in answer to Dr. Harley's objection, that

white stools were present If the common duct above was occluded, that the color of the feces depended on two factors and not on one; both the bile and pancreatic juice were necessary for the production of the normal color. He urged that there were cases of colorless stools which could not be accounted for; that the cause must be sought for by clinical and anatomical study. In cases of cancer of the head of the pancreas and of tumor pressing on the pancreatic duct, both ducts were often, from their proximity, affected. It was rare for the function of the pancreas to be disordered, and therefore he did not consider disease of the pancreas to be a frequent cause of white stool. Icterus simplex was not easy to explain, and he considered that the pathology of jaundice and the conditions of coloring matter on the stool were very obscure.

Mr. Keetley mentioned a case under his care of cancer of the head of the pancreas, in which the feces were always clay-colored. The gall-badder was greatly dilated, and cholecystotomy had been performed about a month before death. Jaundice was, however, present.

Dr. Walker, in a reply, claimed that the society had accepted his clinical facts, and that in two cases which he had read there were clay-colored stools without jaundice, and that in both there was disease of the pancreas, and that there was no symptoms of hepatic disease. He did not wish to break a lance with Dr. Thudichum on physiological chemistry, and declined to raise the question as to the origin of the coloring matter of the feces. The point of this paper was to urge that two ingredients were necessary for the production of the normal color of the feces. namely, bile and pancreatic juice, and that both must react, the one on the other, under the conditions found in the intestinal canal. He claimed that colorless stools were symptoms of pancreatic disease when there was no juandice, for the absence of jaundice proved that the hepatic and common bile ducts were patent. The urine was normal in both bases, and there was no evidence of excess of bile in the blood.—*Brit. Med. Jour.*

NEVUS AND THE BEST METHODS OF CURING IT.

BY WM. S. GOTTHIEL, M.D.

Various methods of treatment may be employed for the removal of these growths. All of them are amenable to treatment, even the largest port-wine stains.

I. Treatment of Pigmentary Nevus.—The simplest method of removing these deformities is to apply a one per cent solution of corrosive chloride of mercury in alcohol and water to the spot. A piece of linen is fitted to the surface to be treated, and is kept in situ, well wetted with the solution, for four or five consecutive hours. A moderate feeling of burning is felt and the epidermis is raised into a blister. This is punctured at its lower border and an ordinary dusting powder of starch or talcum applied. It takes a number of days for the epidermic crust to fall off, but where it does it leaves the skin white and colorless.

Green soap, spread upon flannel, and kept continually applied for twenty-four hours, causes a complete desquamation of the epidermis, with the disappearances of superficial pigmentations.

The ethylate of Sodium is a caustic that has given good results in these affections. It should be made fresh by adding metallic sodium to absolute alcohol. If ordinary and not absolute alcohol is employed, ordinary caustic soda is produced instead of of the nascent sodium, and the effect of the remedy is lessened. The solution is applied to the spot with a glass rod, and the part is then allowed to remain undressed, since the contact of any substance containing water is liable to cause an excessive amount of suppuration. After the crust has loosened, a dust powder as above may be applied. The pain is not severe.

Curetting may be tried if other means fail. The entire pigmented area can be removed rapidly and effectually with stout sharp dermal curette. These can now be obtained of the instrument-makers in various sizes. A small and very superficial scar will be left.

Excision is the last resort. A clean oval cut around the spot, done antiseptically, with one or two catgut or silk-worm gut sutures, the wound then covered with a small mass of five per cent iodoform absorbent cotton, and flexible collodion painted over the mass so as to form an impervious and permanent dressing, will leave little if anything of a scar. Certainly, on exposed parts of the body, such a mark is preferable to a disfiguring nevus.

II. Treatment of Hairy Nevi.—Curetting and excision, as detailed above, may be employed here, but the best method is that of

Electrolysis. It causes the least possible amount of scaring. It is safe and is very successful. The method of its use and the necessary instruments have been fully described in the February and March number of this journal for the current year, to which the reader is referred. Here, of course, a deeper and farther reaching electrolytic action is required. All the hairs lanugo and ordinary, should be first destroyed. If, after they have been permanently removed, a certain amount of vascular or connective tissue hypertrophy or both is left over, the needle should be plunged obliquely into the base of the growth from a number of points on its periphery, and as strong a current as the patient can bear applied. In the vicinity of each needle-track will be an area of occluded vessels and destroyed tissue. If a sufficient number of such areas are created, the vascular supply of the tumor will be cut off, and it will slough. In the course of a few days it becomes black, dries up and drops off. In small nevi—in those not larger than a large pea—absolutely no trace of of the growth or of scar tissue will be left, if the operation is skillfully performed. In any odrinary case the resulting disfigurement will be entirely unnoticeable. I have repeatedly removed such growths from the forehead,

cheeks and chin, where not even the aid of a magnifying-glass could enable the observer to find the site of the tumor. A slight modification in the form of the needle is advisable when the growth is of any size. The instrument makers supply one about as stout as a darning needle, with a small lance shaped point, and covered with an insulating material to within half an inch of its tip.

III. Treatment of Connective Tissue Nevi.—Repeated paintings of the part with pure nitric or caustic potash (ʒi iv to ℥i) does well in this form of growth. Each application causes a superficial slough; when that is thrown off, the application may be repeated. In large growths, of course, a portion only should be cauterized at a time. For small nevi a tartar emetic ointment (gr. ix to emplat. adhes. ʒi) does well and is not painful. Pustulation and suppuration occur, the growth is destroyed, and a thin soft scar is left. It cannot, of course, be used upon the face, but may be employed upon the scalp and other portions of the body.

The galvano-cautery can be employed if other means fail. The platinum knife or strip, heated white-hot, is to be either superficially applied or sunk deep into the mass, in accordance with its prominence and density. A poultice or emollient ointment may be applied subsequently to facilitate removal of the mass.

Finally, a circular incision just through the skin may be made around the base of the mass, and an elastic ligature applied, such as is used for hemorrhoids. This, of course, can only be done when the growth has something of a neck around which the ligature can be passed·

IV. Treatment of Vascular Nevi.—These are amongst the commonest of these growths, and are the variety that most frequently need our attention. Most nevi of the other varieties have a varying amount of hypertrophic vascular tissue in their structure, and will fall largely under this head in respect to their proper treatment. Various methods, all more or less approriate to certain cases, may be employed; but an accurate differentiation and a careful selection of the best method is necessary to insure a cure.

Small vascular nevi, flat or raised. arterial, venous, or capillary, pin-head to small pea size, can be most readily destroyed with a red-hot needle. Painting the surface with a four per cent solution of cocaine and injecting a drop or two of a two per cent solution of the same drug into the base of the tumor robs the little operation of all pain. The needle must be thoroughly moved around in all directions, so as to completely destroy the growth. A needle or a solid glass point dipped in pure nitric or chromic acid will accomplish the same purpose.

Small-sized, flat capillary nevi may be simply painted over with pure nitric acid. Sodium ethylate, as described under No. 1, may be used, a little of an alcoholic solution of opium being added to lessen the moderate pain caused by the application. Caustic potash (ʒ i-iv to ℥i) may also be employed.

Larger telangiectases need more energetic treatment. Here the method of lineal scarification, introduced by Squire, is valuable. An ordinary round-bladed knife, or one of the scarifiers figured in the November, of last year, number of this journal may be used. When any considerable amount of scarification is to be done, these latter will be found to be much the more convenient. The part to be operated on is frozen with the ether spray, or anesthetized by painting a 4% solution of cocaine over it. Cross-hatching, as the artists term is then done. A series of parallel cuts about one-sixteenth of an inch apart is made over the whole, or part of the surface affected. These cuts should go just deep enough to divide the hypertrophic vessels. Another set of similar cuts at right angles to the first set is made over the same surface, forming the cross-hatching. Pressure with pledgets of cotton is then made to stop the hemorrhage. The tortuous and enlarged vessels are divided in every direction, the circulation is cut off, and they are destroyed. Squire's scarificator, which consists of series of sharp hooks, so set in a handle that they can only pass a certain distance into the skin, may be employed. A description and drawing of the instrument will be found in the article above mentioned. In larger telangiectases, a certain portion can be gone over on alternate days or twice a week. In spite of certain adverse criticisms, this method has proved in my hands one of the most successful modes of treating this affection.

Punctate sacrification has been introduced by Sherwell, who employs a number of needles arranged in a bundle for the purpose. By means of a spring they may be made to penetrate the tissues simultaneously. Pure carbolic acid, or a twenty-five per cent. solution of chronic acid may be used on the points. Pressure is employed to stop the bleeding; the part is washed off with alcohol and several coats of a thick collodion solution are applied.

Vaccination has been quite extensively employed, and with good results. Quite large erectile and sessile nevi have been cured in this manner, as well as more or less extensive telangiectasis. The operation may be performed at the circumference or upon the surface of the tumor, the points of insertion being about half an inch apart, and an abundance of vaccine matter being used. A lancet is apt to cause too much hemorrhage, so that the stream of blood washes away the vaccine matter. A stout needle is preferable as a sacrificator. (The New York Board of Health recommends an ordinary needle for vaccination in general, since they are everywhere obtainable, and a new one may be used for each patient.)

Electrolysis is as much in place here as it is in the case of the hairy nevi. The needle is passed into the growth in various directions, and the vessels are destroyed. It is possible to cause death and sloughing of comparatively extensive growths in this manner. It possesses many advantages in the treatment of all ordinary nevi. It is safe; there is little hemorrhage or

pain, and scarring is absent or reduced to a minimum. The method is exactly similar to that employed for the destruction of superfluous hair.

Injections into the tumors are only to be used in exceptional cases. Formerly they enjoyed a considerable reputation in the treatment of nevi, but the accidents that occurred when they were used were so serious and frequent that they have been largely abandoned. The idea was to cause coagulation of the blood, and so effect occlusion of the vessels of the tumor. The tissue of the tumor is to be torn up with a needle, and about ʒss. of a solution of chloride of zinc (gr. x-xii to ℥i) or tannin (ʒi-℥i), or tr. ferri chlor., is to be injected into the center of the tumor. Not only does severe inflammation, sloughing of the tumor, and consequent deformity often ensue, but more serious troubles, gangrene, pyemia and embolism, may occur. Bryant lost a patient from embolism a few minutes after injecting a nevus of the cheek. The application or a ligature to the base of the growth before operating will tend to prevent the occurrence of such an accident. The method is only to be employed when others fail.

Ligature and excision, one or both, is again to be recommended where the nevus is pendulus or there is much connective-tissue hypertrophy. It is usually not necessary to ligate the whole growth if it is extensive; if a part only be securely tied off, the inflammatory action usually spreads to the rest of the tumor, and the whole sloughs off. A pin should be passed through the base of the growth, to afford a base for the application of pressure in case of excessive hemorrhage; a needle armed with a double ligature is then passed through the tumor at right angles to the pin, and the growth is ligated wholly or in part. The tied part should be punctured to secure more perfect occlusion.

Finally, in some cases excision with the galvano-cautery gives the best results. The knife must be white hot, so that it preserves its heat in the deeper tissues.

Such are the remedies most useful in the treatment of the various kinds of nevus. In a general way, the milder should always be tried before the severe and more radical measures. And, if the new growth is of any size, the general rule holds good that only a small portion of it is to be operated upon at one time.—*Ind. Jour. Surg.*

Soluble Phosphate of Iron (*Journal de Medicine de Paris*).—Jolly has published an article showing that iron only exists in the blood under the form of phosphate. The following are his conclusions: The success of treatment by iron, other than phosphated, is subordinate to the richness of the organism in circulating alkaline phosphates; but as no indications can instruct the physician as to the amount of phosphatic alkali in his patient, he can only count upon the benefit of ordinary ferruginous medication. In such case, is it not reasonable to prefer a phoshated preparation of iron? M. Ch. Lecerf takes the same view as M. Jolly; and three years ago, at the request of Dr. Viry, he undertook the discovery of a soluble preparation of iron, of constant composition, and capable of being easily assimilated. It is known that the phosphates of iron are insoluble; they are only absorbed through the intervention of the acids of the stomach, which are thus diverted from their special functions to promote the transformation and digestion of food. These conditions of decomposition are not peculiar to the phosphates; they exist for all insoluble preparations of iron, and their prolonged use nearly always induces digestive difficulties. The salts of iron which least affect digestion are those which are soluble in acids of organic origin; but the preparations are only rendered soluble by the decomposition of oxide or of pyrophosphate of iron in the tartrates or citrates of ammonia or potash. These oxides or phosphates of iron are dissolved in a moist state immediately they are precipitated; the solutions thus obtained are dried on glass plates, and supply the flakes which are usually found in commerce. This brief glance at the mode of preparing these iron compounds show how difficult it is, if not impossible, to obtain products of a stable composition. It became, therefore, desirable to find a ferruginous preparation which should posess always identical properties. In Dr. Lecerf's researches he only studied the phosphates, being convinced of their value in anemia, and of their superiority over all other salts, provided that it was not necessary to borrow materials for their solution from the organism. He found that there exists a combination of iron with citric acid which is vere soluble in water, the solution having a neutral reaction on litmus-paper. This ferruginous citro phosphate crystallizes in very small crystals belonging to the fourth system, and assumes a rhomboid or hexagonal form. They are slightly raised tablets or lozenges, or in which the angles terminating the longer axis are more or less truncated. This salt, the composition of which does not vary, owing to its crystalline form, offers as a phosphate a peculiarity which may be usefully noted, for it is a rare exception. Generally the ammoniacal citrate is used as a solvent for salts of iron, and all soluble phosphates may be dissolved in this agent. The salt described, although soluble in water, is very slightly so in the citrate of ammonia, and if solution is effected by heat, is precipitated when cold. Dr. Lecerf believes that this new salt will prove serviceable in cases where iron is indicated. He adds that this salt, which he has taken himself and prescibed for many others, does not produce constipation.—*Provincial Med. Jour.*

A New Cure for Toothache.—Some one has discovered that a weak galvanic current, which will sometimes cure a toothache, may be generated by placing a silver coin on one side of the gum and a piece of zinc on the other. Rinsing the mouth with acidulated water is said to increase the effect.—*Pharm. Rec.*

Total Extirpation of the Pregnant Cancerous Uterus. In October, 1888, Dr. Zweifel, removed a cancerous uterus in the sixth month of pregnancy. The operation was performed half through the abdomen, half through the vagina. First the patient was placed in the lithotomy position. The cervix was separated from the vagina, and Douglas' pouch opened by means of a Paquelin's cautery. The vagina was then packed with iodoform gauze. Then the patient was placed in the usual position for abdominal section, the uterus exposed and opened, and the child extracted. An elastic ligature was applied to the lowest part of the uterus, and the broad ligaments were tied above it. Then the uterus was cut away, and the vesico-uterine fold open. The abdominal wound being closed, the patient was once more placed in the lithotomy position, and the cervix freed entirely from its connections. Dr. Zweifel objected to leaving the wound open, as he had often seen intestine prolapse and adhere to dressings. He therefore closed the corners of the wound, and inserted a T shaped gutta-percha tube. The patient recovered, convalescence being retarded by the formation of a large bed-sore after an attack of gastric catarrh, with emaciation. The child was not saved, An abstract of the case appeared in the *Centralblatt f. Gnyacologie*, No. 12, 1889. Total extirpation of the cancerous uterus, at term, has been performed twice by Schroder, with fatal results, and once by Bischoff, where the left ureter was tied, and the patient died. Sir Spencer Wells' case, performed at the sixth month, the mother recovering, occurred in 1881, and is well-known to British surgeons.—*British Med. Jour.*

How Drunkards are Treated in Norway.—The London correspondent of the *Am. Prac. and News* says that a well-known medical man, who has recently been in Norway, gives a glowing description of their manner of treating dipsomaniacs. An habitual drunkard in Sweden and Norway is treated as a criminal in this sense, that his inordinate love of strong drink renders him liable to imprisonment, and while in confinement it appears he is cured of his bad propensities on a plan that, though simple enough, is said to produce marvelous effects. From the day the confirmed drunkard is incarcerated no other food is served to him or her but bread and wine. The bread, however, it should be said, cannot be eaten apart from the wine, but is steeped in a bowl of it and left to soak thus an hour or more before the meal is served to the delinquent. The first day the habitual toper takes his food in this shape without the slightest repugnance; the second day he finds it less agreeable to his palate, and very quickly he evinces a positive aversion to it. Generally, the doctor states, eight or ten days of this regimen is more than sufficient to make a man loathe the sight of wine, and even refuse the prison dish set before him. This manner of curing drunkard habits is said to succeed almost without exception, and men or women who have undergone the treatment not only rarely return to their evil ways, but from sheer disgust they frequently become total abstainers afterward.

The Hot Air Treatment.—Some rather surprising statements, in regard to the hot air treatment of consumption, have recently been made by Dr. Steinbrueck, of Halle (*Deutsche Med. Zeitung*, May 23). As the result of his investigations he concludes:—1. That when air at 150° C. (302° F.) is breathed, the temperature of the lungs rises only ½° to 1° C., as may be shown by a thermometer placed in the expired current. The lungs are not heated up, and therefore the bacilli can not be destroyed in this way. 2. The benefit of the heat, he insists, is solely on the characteristically inflamed areas in the lungs and upon the catarrhal inflammation of the bronchi; whereby cough and expectoration are favorably acted upon. Should this not occur in eight days' time, the proceeding had better be entirely suspended. "Woe unto him," says Dr. S., "who forcibly seeks to attain more." 3. The good effects of this treatment upon tuberculosis are due to the dryness of the inspired air. He, therefore, secures dryness by heat of 1000° C., dilutes the air with sufficient nitrogen gas to reduce its oxygen 3 to 5%. This air then, cooled down to ordinary temperatures, is inhaled for four hours daily.

The writer concludes thus:—"Phthisis is cured, therefore, not by the annihilation of the bacilli by means of the direct action of hot, dry, rarefied and diluted air, but by giving support to the cellular elements preformed for that purpose. It is the nutritive soil of the bacillus that must be acted upon in order to attain results; this is accomplished by the use of an atmosphere rendered absolutely dry at a heat of 1000° C., considerably rarefied and deprived of oxygen to the extent of 3%, by diluting with nitrogen. It is inhaled at a temperature of 16° to 30° C. (60° to 86° F.)"

The people are beginning to inquire about the hot air treatment: We should make every effort to prevent its becoming a popular sensation.—*Ind. Med. Jour.*

Antypirin Epilepsy.—All cases of poisoning by this drug are important, since, from its undoubted utility not only in fever, but also in neuralgias, it has become very popular. Tuczek has recorded a case in a boy æt. 9 years, to whom the drug was given to allay the paroxysms of whooping-cough. The patient had never suffered from convulsions, rickets, or worms. The dose given was about 17 grains daily in three doses for the space of three weeks. At the end of this period the patient was seized with vomiting, and passed into a state of somnolence, ending in deep sleep. Rapid ensuing epileptiform spasms followed, sometimes general, sometimes unilateral, accompanied with grinding of the teeth and jactitation, arythmia of the cardiac beat, and dilatation of the pupils. A macular eruption appeared on the skin, and the temperature became sub-

normal, while the pulse was slow and tense. On the third day of poisoning, consciousness began to return, the convulsions diminished in severity, and ceased entirely on the fourth day. For a few days the child was depressed, but completely recovered. It is interesting to find that during the whole period of poisoning there was acetonuria—a condition which is ascribed by Tuczek to the increased destruction of the albuminoid constituents of the body caused by antipyrin. During the poisoning there were, as might be expected, no attacks of whooping-cough, but afterwards the paroxysms returned with increased severity, and lasted for some months.—*Brit. Med. Jour.*

A Lesson.—The danger of drawing inferences from the observation of single cases was well illustrated by Dr. Robert W. Taylor at the recent meeting of the Association of Genito-Urinary Surgeons over which he presided. In speaking of the incubation of syphilis, he described a case in his own practice which at first seemed to contradict the generally accepted view of the length of time which must elapse between infection and the appearance of the chancre. A patient showed a chancre within forty-eight hours after a single intercourse; the closest cross-examination failed to shake the patient's statement. The case was shown to Bumstead, who said that it was a nice one, but said that one case in the hands of one man could not contradict the well-established general opinion in regard to the question. Some time after the same patient called upon Dr. Taylor and showed an excoriation upon the glans penis which he said was due to intercourse with a woman *per orem*, and upon further questioning admitted that in the previous case he had exposed himself in the same way three weeks before the appearance of the sore, thus clearing up what might have passed for an apparent contradiction of the rule that the incubation period of syphilis is long.—*Northwestern Lancet.*

Relative Strength of the Homeopathic and the Regular Schools.—In the United States there were in 1885 twelve homeopathic and eighty-eight regular medical colleges with 1,089 and 9,441 students, respectively. At the most liberal estimate the homeopathic practitioners of this country form one eighth of the total number. There is no homeopathic medical college in the country which can be said to be even fairly well equipped and endowed, as compared, for example, with the leading regular medical colleges of New York, Boston and Philadelphia. The only school which really flourishes numerically is in Chicago.

The statement that "homeopathy is a recognized branch in most of the great medical schools of Europe" is absolutely untrue. Homeopathy has no place whatever in any of the universities of Germany or France, nor has it a school of its own anywhere in Germany. There is a small homeopathic hospital of one hundred beds in London, with a small medical school attached.

There are said to be only about 275 homeopathic physicians in all great Great Britain and Ireland. The number on the Continent is proportionately even less.—*Med. Rec.*

The Absolute Signs of Death.—Dr. B. W. Richardson, in a paper read before the Medical Society of London (*Lancet*, December 15, 1887), gives the following efficient practical details: 1. Apply the fillet to the wrist and examine the veins at the back of the hand. If life is not extinct, turgescence of these veins will soon be apparent. 2. Open a vein at the bend of the elbow and seek for stringy coagula; if necessary, two or more veins. 3. Inject ammonia hypodermically—after which the absence of a red blotch under the skin will be strong evidence of death. 4. Examine by strong light for absence of red color from the transparent tissues. 5. If any doubt still remains, and rigor mortis has not developed, let the body be kept in a damp room at 84°F.; this will speedily bring about decomposition if the body is dead, and will favor recomposition or restoration if life is not extinct. This last test has the advantage that it can be carried out in cases where it is forbidden to touch the body.

Embalming.—The best process of embalming is called the "Brunelli Process." The circulatory system is cleansed by washing with cold water till it issues quite clear from the body. This may occupy from two to five hours. Alcohol is injected so as to take out as much water as possible. This occupies about a quarter of an hour. Ether is then injected to abstract the fatty matter. This occupies from two to ten hours. A strong solution of tannin is then injected. This occupies for inbibition from two to ten hours. The body is then dried in a current of warm air passed over heated chloride of calcium. This may occupy from two to five hours. The body is then perfectly preserved and resists decay.—*Med. Bull.*

The Treatment of Dysentery with Creolin.—After having carefully observed the effects of creolin in sixteen cases of dysentery, Dr. Ossovski, in the *Revue gen. de clin. et de therap.*, June 6, 1889, unhesitatingly recommends it in this disease. The treatment followed by him was merely to give the patient two or three injections daily of a solution of creolin (I to 100). Besides its antiseptic properties the drug also acted as a hemostatic, and quickly checked the bleeding of the irritated intestine. When given to patients subject to malaria, the drug in some instances caused a rise of temperature, which, however, is speedily overcome by quinine.—*Med. News.*

THE PATIENT.

VERY ILL.

Name Oh Doctor, name your fee,
  Ask—I'll pay whate'er it be;
Skill like yours I know comes high,
  Only do not let me die.
Get me out of this and I,
  Cash will ante instantly.

CONVALESCENT.

Cut, Oh Doctor, cut that fee,
  Cut or not a dime from me;
I am not a millionaire,
  But will do whatever's square,
Only make a bill that's fair,
  And I'll settle presently.

WELL.

Book Oh Doctor, book your fee,
  Charge—I'll pay it futurely;
When the crops all by are laid,
  When every other bill is paid,
Or when of Death again afraid,
  I'll pay it grudgingly.—*St. Jo Med. Herald.*

THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS will hold its next annual meeting at the Burnet House, Cincinnati, O., in the rooms lately occupied by the Military Order of the Loyal Legion, on Tuesday, Wednesday and Thursday, September 17, 18 and 19, 1889. No formal invitations will be issued to non members, but the Association hereby extends a cordial invitation to such members of the profession wherever resident as may feel interested, to attend the meeting and participate in the proceedings. The papers and discussions will embrace subjects pertaining to obstetrics, gynecology and abdominal surgery.

By order of the president,

WILLIAM WARREN POTTER, Secretary.

LOSS OF KNEE JERK IN ONANISM.—E. de Rienzi states that if in weak and pale children, whose condition cannot be explained by any discoverable organic disorder, and whose very excitable and sensitive vascular system would lead us to suspect rather increased than diminished reflexes, complete loss of knee-jerk is found, then we have an indisputable sign of masturbation. This fact is suggested by the numerous cases which have come under his observation.—*Revista clin. e terap.*

ENDO AUSCULTATION.—A new method of physical examination has been devised by Bianchi, which consists in making use of the common esophageal tube passed into the stomach to auscult the gullet and stomach, and through them the heart and lungs. The tube is bifurcated at the upper end and with ear-pieces, as in a binaural stethoscope, and the inventor says sounds may thereby be detected indicative of a smooth or rough condition of the mucous surfaces over which it travels, the presence of foreign bodies, diverticula, tumors, etc. From the weakness or absence of the cardiac and respiratory sounds, conclusions may be drawn as to the thoracic organs, the walls of the stomach, etc.

HOW TO CLEAN HYPODERMIC SYRINGES.—Syringes, whose canals have become obstructed so that a fine wire cannot be drawn through, are cleaned by holding them for a moment over a flame; the foreign substance is thus quickly destroyed and driven off. If a wire has been rusted into the needle it should be dipped in oil before holding over the flame. To remove the rust from the interior of the canula it is well to pass oil through the canula, then heating it; then rinse it out with alcohol. The needle is then ready for use.—*Deutsch Med. Wochenschr.*, 1889.

"BLACK EYE."—There is nothing to compare with the tincture or a strong infusion of capsicum annuum mixed with an equal bulk of mucilage of gum arabic and with the addition of a few drops of glycerin. This should be painted all over the bruised surface with a camel's-hair pencil and allowed to dry on, a second or third coating being applied as soon as the first is dry. If done as soon as the injury is inflicted, this treatment will invariably prevent the blackening of the bruised tissue. The same remedy has no equal in rheumatic sore or stiff neck.—*N. Y. Med. Times.*

DANGER IN CANDIES has again been discovered in some of the green papers used by confectioners to wrap around caramels and bon-bons. Van Hamel-Roos (through *Zeit. f. Nahr. Unter. u. Hyg.*) has found in some samples of this paper as high as 20% of Scheele's green, a compound of arsenic and copper. It is easily seen how children could carelessly eat poisonous amounts of this "fly paper" adhering to the sweetmeats, independent of the liability of the candy absorbing from the paper some of its injurious properties.

COCAINE TOOTHACHE PELLETS.—

℞	Cocaine hydrochlor.,	grs., 15
	Opium,	grs., 60
	Menthol,	grs., 15
	Althea, powdered,	grs., 45

Make into a mass with glycerin and gum arabic, and divide into pellets weighing one-half grain each.

One of these placed in a hollow, aching tooth is said to give prompt relief.

ORIGINAL ARTICLES.

RETRO-CATHETERIZATION IN THE TREATMENT OF URETHRAL STRICTURE.

BY BRANSFORD LEWIS, M.D., ST. LOUIS.

In the June number of *Progress*, Dr. John Young Brown details the treatment of a case of stricture of the urethra, as carried out by himself, in consultation with Dr. Arch. Dixon.

Dr. Brown, when first called to the patient, found him suffering greatly from retention of urine; after both he and Dr. Dixon had failed to gain entrance to the bladder with any instrument, even with the patient anesthetized, it was decided that the next most advisable procedure was supra-pubic cystotomy for the purpose of retro-catheterization, and, when a guide to the perineal urethra should thus be obtained, to make an external urethrotomy for drainage and division of the stricture. This plan was accordingly carried out—successfully in every particular—and the patient recovered in good time.

While congratulating the doctor on the happy termination of his case, I cannot refrain from entering a protest against the application of this comparatively serious operation at the time chosen. It is a cardinal rule in surgery, that the simpler methods, and those involving the least risks to the patient, should always be tried first—at the same time, of course, taking into consideration, the question as to whether these simpler methods incline to dangerous temporizing.

The author justifies the course followed, on these grounds:

1. Because of the difficulty of making an external urethrotomy without a guide, the stricture being located, in this case, in the "anterior bulbous" region.

2. Because of the harmlessness and simplicity of epicystotomy, rendered so by the protection that antisepsis gives, "the results reported so far being uniformly good."

3. Because of the ease with which retrograde catheterization may be effected.

4. It assures a guide through the perineum.

5. In view of the fact that the major portion of so-called impervious strictures will relax when the irritative action of the urine is withdrawn, it enables the surgeon to make perineal section, drain the bladder and subsequently, make internal urethrotomy.

6. When internal urethrotomy is subsequently made, the urine being drawn through the perineum, the internal wound can be separately treated, and, as no urine comes in contact with it, the possibility of urine-fever is avoided.

7. In all cases of impervious stricture, there is more or less chronic inflammation of the viscus, and perineal section and drainage is unquestionably the ideal treatment for this condition.

8. The perineal drainage relieves all tension on the bladder, the supra pubic incision can be close (closed?) and primary union looked for.

It will be observed that no account is taken here of the *really* simple and oft-employed expedient of tapping the bladder with trocar and cannula, thus giving an immediate vent for the urine, and conducing, by its removal of the pressure from that source (as the author himself mentions in his 5th reason) to relaxation of the stricture, which in such cases, nearly always manifests some spasmodic element in its action. Not a few times have I seen tapping of the bladder, followed up by the administration of morphia and other relaxing sedatives, of warm baths, etc., end, after some hours, in the calming of the excited stricture to such a degree that a filiform was then allowed to pass. And then, if necessary, the bladder may be aspirated repeatedly, with this end in view. Keyes[1] says that "the aspirator may be used day after day, and several times a day, if necessary, the fine needle being inserted with as much impunity into the bladder above the pubis as is customary in using a hypodermic needle for the purpose of subcutaneous injection."

The introduction of a filiform in this case would have obviated the necessity of any other operation than internal urethrotomy, as there seems to have been no more cystitis or systemic reaction than accompanies all such cases; for it will not be contended, of course, that simply because internal urethrotomy is sometimes attended with urine fever, therefore it should always be substituted by an operation that gives security against this complication—although, at the same time, it entails freer cutting and more radical methods. In other words, it will not be claimed that external urethrotomy, with the drainage that it gives is *always* preferable to the internal incision.

But in such a case, granted that aspiration has been performed, perhaps repeatedly, and it has failed to afford the relaxing influence hoped for on the tight stricture; that it is still impossible to get any instrument into the bladder; what then is to be done?

I respectfully submit that epicystotomy is not yet to be thought of. From the history of the case—difficulty in passing water, of eight years duration—we may suppose, and with every degree of assurance that our supposition is correct, that there is a dilatation of the urethra behind the constricted part, superinduced by the hydrostatic pressure required to squeeze the water through the narrow orifice. In the case under discussion, as the stricture was located in the anterior bulbous region, the dilated portion must have lain at a most convenient site for the exploring knife of a surgeon making an external urethrotomy without a guide. Moreover, in view of the dilated condition of the channel, and of the fact, that large distention of the bladder

[1]Genito-Urinary Diseases, with Syphilis, 1888, p. 127.

indicated absolutely that water was then stretching it to its utmost, *is* it probable that external urethrotomy even without a guide, would have such a difficult operation? Is it not more likely that the surgeon could hardly avoid "striking water" if he had started in the median line and kept track of his bearings?

I appreciate the fact, that authors of the highest standing have long said that the operation of external urethrotomy without a guide *may* be one of the most difficult operations in surgery; but the truth of this assertion can apply only to a different combination of circumstances from the one presented here; to a freshly ruptured, previously healthy urethra, for instance, that is neither chronically dilated nor widely distended from retained urine.

It would appear, then, that *in this kind of a case*, the difficulty of performing external urethrotomy is more mythical than real, especially when Wheelhouse's modifications are employed; and that with reference to this point, the epicystotomy afforded no material service in the performance of the perineal section.

As to the doctor's second reason for adding the suprapubic to the contemplated perineal section, that "with the present protection which carefully observed antiseptic technique holds out, I cannot see why we may not with as much impunity make an epicystotomy,as we do an exploratory laparotomy, for truly, the dangers of the former are by no means great in comparison with those of the latter, especially as the results so far reported are uniformly good." Even supposing epicystotomy to be as harmless and innocent a procedure as it is here represented to be,why add *anything* to the sum total of risks involved when it may be avoided? Why superadd epicystotomy to perineal section before perineal section has proved inadequate?

On the other hand, I do not admit that the results of epicystotomy, so far as their promptness in healing is concerned, are as uniformly successful as the paucity of reports to the contrary would indicate. The cases which do not turn out in this schedule fashion, are not reported. I have personal knowledge of several such, occurring here in the city, even when it was thought antisepsis had been most rigidly observed. We cannot always depend on the completeness and reliability of our antisepsis. And this is especially true of operations performed in private practice.

Indeed, the words of Dr. Brown on this point are quite *apropos*: "In regard to technique, it must be insisted that vigorous and careful antisepsis be carried out, for neglect in the slightest detail in this direction may result disastrously."

And the danger (no fancied one, either) from so suddenly withdrawing *all* of the backward urine-pressure from the bladder, pelves and tubules, conducing to congestion, hemorrhage, or suppression of urine and death, must be considered. When epicystotomy is made, the retained urine cannot be taken away gradually, and as gradually replaced by smaller and smaller quantities of antiseptic fluid, such as boric acid solution, for instance.

In considering the third reason, I am reminded of a point to which my friend, Dr. J. P. Bryson, has called attention: That in long-standing strictures, the physical condition of the urethra in the neighborhood of the stricture is usually something like this:

The bagging having been produced by the dilating force of the urine dammed up behind the constriction; it may readily be questioned whether it is so much easier to get an instrument to pierce the small opening from behind than in front. Of course the catheter used in this way may serve to guide us to the stricture, but one introduced from the meatus would perform the same office.

The fourth point of argument, I concede; but I should resort to this means of obtaining such a guide through the perineum, only after failure to find the posterior part of the channel by external urethrotomy alone had made its necessity evident.

The fifth has already been answered.

The sixth and seventh reasons show simply the advantages of the combined external and internal, over simple internal urethrotomy, and do not relate to the point at issiue.

The eighth may or may not be true—possibly in the majority of cases, union would be primary; but primary union has been missed in many cases in which perineal drainage was thus maintained.

I think therefore that we are not yet ready to adopt the plan as suggested and detailed in the above paper.

I have often thought that possibly we might succeed in retro-catheterization, when its assistance should really become necessary, by first puncturing the bladder with trocar and cannula, withdrawing the former and introducing through the latter a flexible bougie, directing it toward the urethral orifice and hoping, in that way, to obtain a guide upon which to cut through the perineum.

Chapped Hands.—The *Revue de Ther. Med. Chir.*, June 1, 1889, gives the following salve, which, it says, is a most valuable toilet article. It keeps the hands white and smooth, and quickly remedies all redness and roughness of the skin:

℞	Lanolin,	℥iijss.
	Liquid paraffin,	℥ijss.
	Vaniline,	grs. ij.
	Attar of roses,	gt. j.

M. The salve should be applied morning and evening.

REPORT OF A CASE OF DOUBLE PNEUMONIA FOLLOWED BY ABSCESS OF LEFT LUNG, RESULTING IN RECOVERY.

BY JAMES Y. LEWIS, M. D., QUINCY, ILL.

May 1, 1888, I was called to see Mr. G. W., æt. 50 years, who had been under the care of another physician. I found the patient in a severe attack of syncope, and after relieving him of this, discovered that he was suffering from pneumonia confined to lower lobe of right lung.

He was very much prostrated and was revived with difficulty from sinking spells which recurred at short intervals for about ten days.

Three days after I was called I noticed inflammation beginning in the lower half of the left lung. The respiration, already labored, was now very quick, shallow, and painful; extremities cold and discolored, with appearance of approaching death. The pulse was very weak, thready and rapid, with frequent attacks of protracted dyspnea and syncope, apparently caused by heart failure and perhaps slight asthmatic tendencies.

Mr. W. had been subject to a mild form of chronic Bright's disease for ten years past, albumen being almost always present. At this time I found an abundance of albumen upon testing the urine.

There was retention of urine, which had lasted 36 hours before I saw him. I used the catheter and relieved him. I afterwards drew his urine three or four times, when he became able to pass it, but only with much pain, which lasted hours after micturition. A large cantharidal blister put on by my predecessor and neglected was to blame probably for the urethral hyperesthesia which lasted three weeks. This pain recurred each time, in spite of anodyne and alkaline treatment, and was only relieved by injection of sol. cocaine, 10 gr. to ℥j; this required but three or four injections to permanently relieve it. Sleeplessness was one of the most ungovernable symptoms of this case; for five days and nights the eyes were not closed (except by compress), and corneal ulcer resulted from severe conjunctivitis, caused by their exposure to the continued irritation of dust and light. This complication yielded to the usual collyria used in these cases, but left slight opacity of the cornea with impaired vision. It is perhaps well to note that the left eye had been weak and subject to attacks of inflammation before.

During the two weeks that followed my taking charge of Mr. W., and the subsequent invasion of the left lung, the course of the pneumonia was very severe but normal; but when a point was reached where resolution had taken place in the right lung and partial resolution of left, there was noticed a circumscribed spot as large as a man's hand (about the left nipple), which remained consolidated, but was surrounded with moist mucous rales.

At this time there developed a very annoying cough, "hacking," dry and painful, with hectic fever, night sweats and sharp and continuous pain confined to this circumscribed area. External signs were not of marked interest.

The temperature, which had been high, but had fallen to nearly normal, now became again higher (99° in A. M. to 103° P. M.) and very variable during the day. The pulse, from the extremely rapid action at the time of invasion (130 per minute), falling to 90, now rose again to 110 and remained so till the rupture of the abscess May 12, 1888. A few days before the rupture took place the sputum was not free, but the odor was very offensive, and patient had been complaining of a "sauerkraut" taste in his mouth for some time.

The diagnosis of abscess was made five days before it ruptured, and speculations made as to whether it would open internally or externally (for it appeared to be near the surface). We were greatly pleased when the abscess opened into the bronchi, from which the pus was expectorated. Nearly one pint of pus, infiltrated lung tissue and arterial blood were coughed up, which caused much alarm till the hemorrhage ceased and expectoration became quieter. The pus and broken down tissue looked as near like calf's liver as anything I could think of, and there was a considerable quantity of it—masses as large as English walnuts being coughed up for days after the rupture. Gradually they grew smaller and finally disappeared from the sputa.

Within 48 hours after the rupture of the abscess a decided change in the symptoms was noticed and a slow but sure convalescence was established. To-day, Aug. 17, Mr. W. has gone to his work as a commercial traveler through the Northwest.

My excuse for presenting this case is the novelty of an abscess following double pneumonia, resulting in recovery. The age of the patient (50 years), his history of Bright's disease for ten years past, his low condition, the formation and opening of an abscess in a patient terribly reduced and debilitated, with recovery ensuing, all point the moral that our motto in attending even the most unpromising cases should be "nil desperandum." The remedies used in this case were such as we employ in all self-limiting diseases: Morphia for the pain, chloral, bromides, hyosciamus, etc., for sleeplessness. One dose of ten grs. of quinia at 9 o'clock P. M. every night. Alkalies and anodynes for the pain in urethra (urine being acid). Afterwards I used cocaine solution, which permanently relieved this disagreeable and annoying symptom, after giving me three weeks of trouble, and after using all kinds of antispasmodics and anodynes, both internally and by injection. A tonic, containing elix. potass. brom. and syr. hypophosphite comp. Fellows, has been used during convalescence. Blisters were applied to area of dulness three times, in the hope of stimulating the absorption of deposit; 1-100 of a drop of nitro-glycerine in solution was given during the "sinking spells," which at times were alarming; digitalis almost all the time, with or without ammonium carbonate.

There still remains a slight cough and soreness at the site of the abscess, but appetite and strength have returned.

Only one trouble now remains; there is swelling of lower extremities after being on the feet all day. By the use of a bandage and by having the patient sit with his feet on the table, they seem to be getting better. If health and strength be regained I believe he will entirely recover from all these unpleasant symptoms, which are, no doubt, the result of weakness.

ULCER OF THE SMALL INTESTINE, WITH PERFORATION.

BY FRED HUTCHINS, M. D., NORTH BLOOMFIELD, CAL.

The following case excited a good deal of interest in those who saw it, both lay and professional, and I consider it worth reporting.

W. E. W., æt. 52 years, Welchman, single, miner by occupation, of good habits and in comfortable circumstances.

He consulted me about 18 months ago for constipation and distress after eating. I gave him Mythe's elixir of gentian and iron, and a pill containing belledonna, nux vomica and aloes; also laid down pretty strict rules for his diet, to which but little attention was paid. He reported about a month after that he was very much better but still found the pills were needed to keep his bowels in active condition. Six months later he went to San Francisco and while there had a bad attack, of which I was not able to get a very clear account. He informed me that one doctor, a surgeon of some note in this state, said he had cancer of the stomach, and wanted to "cut him open."

As soon as he was able to move he started for home, but was so ill at Grass Valley that he was obliged to remain for 10 days. Three physicians saw him while there and all told him he had cancer of the stomach. He finally reached his home, four miles from here, and I was sent for. I found him suffering great pain in his bowels; the abdomen was much swollen, highly tympanitic, and looked and felt as though filled with cobble stones, so distended with gas were the intestines. After giving him a glycerine injection, and administering by the mouth several doses of oil of turpentine, I got a large evacuation of a hard, dry mass of feces, and left him relieved for that time. These attacks were several times repeated in spite of the treatment, but he gradually recovered his health and in three months was as strong as ever.

My diagnosis was that there existed some form of stricture of the intestine not far from the ileo-cecal valve. Two other physicians saw him during his illness; one said cancer of the stomach, the other, gall stones.

His health continued good up to about two months before his death, when he had a very bad attack of constipation with great pain. The bowels presented the same appearance as before, but he was much reduced in flesh and looked much worn. I expressed myself somewhat doubtful as to the result, and as I failed to do him any good, the physician that had diagnosed gall-stones was called. I learned from outsiders that croton oil was given in very large doses, and morphia without stint. He died on the 15th of this month, from "exhaustion."

An autopsy was made 20 hours after death. I was not able to be present, but have a report from an intelligent physician who assisted. On opening the abdomen the cavity was found to be filled with liquid feces, and four inches above the ileo-cecal valve, a hole the size of half the intestine was found. It was an ulcer with thick edges, with some loose shreds of the serous coat of the bowel hanging around it. On the opposite side of the bowel there was an old cicatrix over an inch long, the remains of a former ulcer that had just failed to protrude into the peritoneal cavity. The caliber of the gut was reduced about one-half by the cicatrix. The stomach, liver, gall-bladder and one gall duct were found healthy. The case was one of idiopathic ulcer of the intestine just above the ileo-cecal valve.

In "Pepper's American System" I do not find any mention of these ulcers at or near this location. They are fully described as occurring in the duodenum and in the colon, and the cause is given as chronic intestinal catarrh. I have no doubt that this was the cause in my case.

Drs. Townsend and Coolidge, in summarizing the past and present mortality of pneumonia in the *Med. News*, say:

1. In the 1,000 cases of acute lobar pneumonia treated at the Massachusetts General Hopital from 1822 to 1889, there was a mortality of 15 per cent.

2. The mortality has gradually increased from 10 per cent in the first decade to 28 per cent in the present decade.

3. This increase is deceptive for the following reasons, all of which were shown to be a cause of large mortality:

(*a*) The average age of the patients has been increasing from the first to the last decade.

(*b*) The relative number of complicated and delicate cases has increased.

(*c*) The relative number of intemperate cases has increased.

(*d*) The relative number of foreigners has increased.

4. The causes are sufficient to explain the entire rise in the mortality.

5. Treatment, which was heroic before 1850, transitional between 1850 and 1860, and expectant and sustaining since 1860, has not, therefore, influenced the mortality rate.

6. Treatment has not influenced the duration of the disease or its convalescence.

Virchow is said to be engaged upon a new edition of his "Cellular Pathology".

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,
EDITOR.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

Communications relating to subscriptions and advertisements should be addressed to J. H. CHAMBERS, 914 Locust Street, St. Louis.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, AUGUST 10, 1889.

WHEN SHOULD HYPNOTISM BE USED IN THE TREATMENT OF HYSTERIA?

Though we see little evidence of it eminating from physicians of this country, by watching foreign medical literature, one cannot fail to be convinced that hypnotism is making rapid and substantial progress toward the general recognition of its wonderful, and, when properly and appropriately used, valuable powers. In Germany and France, it is becoming almost as common to prescribe and treat with hypnotism and suggestion, as it is to make use of electricity, so firm a hold has it obtained on the estimation of the profession of these nations.

Public clinics, with hypnotism as the basis of treatment, are being established and conducted under the direction of men, the most eminent in the ranks; and private patients promptly make their appearance for their daily séance.

From this it must not be thought that these profound Germans and astute Frenchmen are going wild and applying the treatment without discrimination; on the contrary, its every phase and effect is being observed, noted and studied with the minutest care, with a view of reducing the method to as near an approach to a scientific basis as any other therapeutic measure ever reaches.

When we think of this, it seems strange that in this country of push and progress, enthusiasm and originality so little has been done in this direction. Why do we not have reports of experiments and cures from our American physicians? Shall we sit idly waiting for our foreign brethren to find out all there is in this wonderful science (as it certainly will be some day) and then kindly retail it to us,teaching us even how to apply it long after they have reduced its mode of application to a mere routine incident? How will our gynecologists and laparotomists, who have recently done so much for the advancement of their branches, regard this tardiness and apathy on the part of their more strictly medical confreres? As not holding up their end of the burden, surely! And they will be quite right in doing so.

Hypnotism has passed the stage of "is there any thing in it?" There *is* something in it, but we are ashamed to acknowledge that this fact, and all else that we know of the subject, is merely a matter of hearsay, so far as we are concerned; an interesting novel, that has been translated and re-lated for our admiration and entertainment, but not for our use.

Dr. Paul Blocq, *Preparateur* of the Clinic for Nervous Diseases, Paris, who has written much on the subject of hypnotism, presents, in *Le Bulletin Medical*, an instructive paper in which he answers the questions: Should hypnotism and suggestion be applied to all cases of hysteria or affections going under that name? If not, what are its indications and limitations? What is its therapeutic value?

He distinguishes the following forms of hysteria:

1. Hysteria vulgar, minor, convulsive; 2. Hystero-epilepsy, major, with attacks; 3. Convulsive hysteria, aggravated by local phenomena; 4. Mono-symptomatic hysteria without attacks.

1. Cases of minor hysteria, in which the disease manifests itself by light attacks recurring at intervals, more or less remote, are certainly met with most frequently. The author thinks that any hypnotic treatment attempted in such cases with the object of suppressing the seizures, or of diminishing their frequency, is absolutely counter-indicated. This form of the disease disappears without much difficulty under ordinary treatment, and it is feared that hypnotism would only increase the nervous excitation.

2. If there be hystero-epilepsy (hysteria major, of Charcot), characterized only by convulsions, such reserve is not advisable, and it is then proper to employ hypnotic suggestion; but probably no more favorable a result than that of diminution of the frequency of the seizures, will be obtained. The "nervous tendency" persists in the majority of instances.

3. When this third variety of hysteria is presented, as often occurs, following an attack of some kind, perhaps paralysis, contracture or amaurosis, hypnotism, if possible, and if applied immediately, shows then its great curative power; and suggestion even during the waking state may be of service in such conditions.

If the pathological state be of longer standing, it is still permissible to make attempts by this method, but chances of success are less favorable.

4. In cases of mono-symptomatic hysteria—by which is meant those cases in which one symptom, or a syndrome of hysterical symptoms, such as contracture, arthralgia, monoplegia, rythmical chorea, cough, blepharo-spasm, etc., alone exist, without attacks or other features—cases so embarrassing to the physician because of their tenacity—it may be said that hypnotic sugges-

tion is indicated, but at the same time other approved methods, such as massage, electrization, etc., should be used.

Like every other resource of materia medica, hypnotism is not an unfailing cure-all; it not unfrequently disappoints in just those cases in which experience has justified the highest hopes. In some cases the hypnotic state is readily attained, but the patients do not obey the suggestions put to them; in others, the beneficial effects last only during the sleep. Charcot has reported several such cases. In such, however, success may follow prolonged repetition of the treatment.

In summary, then, it may be said that in the treatment of hysteria by hypnotic suggestion, there are certain recognized counter-indications; that these become more frequent and prominent as the case partakes of the *petite* (minor) variety; that in other cases, hypnotism only takes a secondary position in the therapeutic *ensemble*; and, finally, it constitutes a *method of choice* only in those cases, relatively rare,of mono symptomatic hysteria, which responds to hypnotism and suggestion, the response enduring through both the sleeping and waking periods.

Absorbable Drainage Tubes Prepared from the Arteries of Animals.

Dr. Beyer, in the *Medical News* for Aug. 3, describes the method of preparing these tubes, which have been used with such satisfaction in the clinical and private practice of Prof. Weeks.

Arteries taken from vigorous young cows or heifers give the best results. They are freed of all fat and extraneous matter and are then allowed to soak in a dish of cold water for two hours. By this time the adventitial coat is found to be macerated and softened; it must be removed in the following way: Fasten the arteries by means of clean tacks at both their ends on the carbolized edge of a clean table, at the same time putting them on a stretch. The fibrous adventitia forming the outer coat is then seized with the thumb and finger of the left hand and cut away by means of a sharp scissors held in the right hand. It may be necessary to go over the vessel in this way several times to free it sufficiently. It should be kept moist all the while. The object of getting rid of the adventitia is to prevent the tube from being too thick and proportionately slow of absorption.

Next boil the arteries for fifteen minutes in distilled water; this not only hardens them to a desirable extent by coagulating the albuminoid constituents, but it sterilizes them. They are then put in a five-per-cent solution of carbolic acid, after which holes are cut. They are compelled to maintain their shape by being drawn over glass rods large enough to put them slightly on the stretch, the whole being immersed for 24 hours in wide-mouthed bottles containing 95 % alcohol. From this they are changed to oil of juniper-berry, in which they remain for two days and are then preserved in absolute alcohol.

This method is very similar to the one used by Prof. Neuber in preparing his bone-tubes.

Every precaution must be observed to maintain an aseptic condition of the tubes.

The process of absorption, says the author, is prompt, thorough and highly satisfactory in every respect, taking place after the manner described for catgut ligatures.

The Annual Meeting of the Mississippi Valley Medical Association.

At no time in the history of this association have the circumstances attending any of its annual meetings been so favorable for a grand success as they are for the meeting at Evansville, Ind., Sept. 10, 11 and 12.

Already a splendid programme is complete. The titles of papers sent to the Chairman of the Committee of Arrangements indicate that all that is new in medicine and surgery will be presented and discussed.

Letters received from all sections of the Mississippi Valley prove the interest in the meeting to be universal and enthusiastic.

At the annual meeting last year the nominating committee was especially fortunate in selecting a place of meeting for this year, just as the American Medical made an admirable selection in deciding upon Nashville for next year.

Evansville is amply supplied with hotel accommodations, and is accessible by river and railroads from all points of the compass.

Arrangements have been made for reduced rates and the readers of the Review who will attend the meeting are advised to get a receipt from the agents of whom they buy their tickets. This is positively necessary in order to get a reduced rate on their return home. The programme will be given in the next issue of the Review.

Injurious Effects of the Telephone.

Not long since we noted the bad effects of the electric light on the eyes, and the peculiar disease which it brought about; now we would call the attention of our readers to some of the injurious consequences of the too continuous use of the telephone. M. Gelle (*Jour. de Med. de Paris*) has noticed such many times. In one case, a man of intelligence, who was compelled to use the telephone every few minutes, there resulted a state of great nervousness and hyperesthesia of the ear, such that sounds caused persistent vertigo and buzzing. Repose would always give relief.

In another patient, a young lady employed in a large establishment which carried on most of its correspondence by telephone, the hearing rapidly deteriorated, but

was at the same time painful, while the ear became the seat of drummings and noises of various sorts. Rest from her occupation gave prompt relief from all of these.

The author thinks that in the sonorous shock transmitted by the instrument there is a traumatic action which may exaggerate to a marked degree any pre-existing oral lesion.

Besides the symptoms mentioned above, the author found in some cases inflammatory states of the tympanum, which were undoubtedly developed through the same influence.

Once the lesion is established, further progress is easy. The injurious effects of telephonic noises should be classed, then, amongst those causes which have long since been recognized as giving rise to diseases of the ear in persons whose occupation requires them to be near noisy machinery and in whom are observable distinct lesions of the tympanum and even more serious manifestations, such as unending pains and neuralgias, enervating and harrassing noises, extreme deafness and chronic vertigo.

The internal, as well as the middle and external ear, is finally affected, and the general nervous system itself undergoes a change, the effect of these repeated shocks.

MEDICAL ITEMS.

M. Dumontpallier has treated, with marked success, many cases of endometritis, with bougies of chloride of zinc *a demeure*.

Coffee a Sedative.—Dr. Blechy says that instead of coffee being a stimulant, as is commonly supposed, it is a counter stimulant, a sedative.

Glad Tidings! Another Medical College.—The prominent physicians of Topeka, Kansas, are organizing what is to be called the Kansas Medical College.

A New Tubercle Bacillus.—M. Chauveau claims to have discovered a new bacillus that is capable of producing tuberculosis when inoculated into rabbits or guinea pigs.

Dr. A. B. Shaw is making some experiments with Brown Sequard's injection treatment, and promises to give the benefit of his investigations to the readers of the Review at an early date.

Epidemic of Dysentery.—An epidemic of dysentery of very serious and fatal aspect has been prevalent in northern Illinois. The disease shows the greatest malignancy, patients, many of them, dying within a few hours of its inception.

They Deferred the Funeral.—In Elkhardt, Ind., recently, after some days' illness, a young lady apparently died, and was, in fact, pronounced dead by her physician. She was "laid out" in shroud and coffin, and her father gave the order for digging the grave. What was his astonishment, on his return, to fine that she had returned to life and was rapidly improving.

Actinomycosis in a Man.—A young man of New York City died Aug. 5th, from actinomycosis, his liver being the seat of an enormous development of the fungus growth due to this disease, which was formerly thought to be confined entirely to animals.

The patient began to complain of soreness in the hepatic region last February; in May he entered a hospital and puzzled the acutest of diagnosticians with his peculiar symptoms, until the nature of the affection was revealed by laparotomy and an incision into the liver. Pus and sand-like particles escaped in abundance, and the microscope completed the diagnosis. Three operations were performed later to obtain better drainage, but the growth could not be checked. Pneumonia and edema of the lungs hastened the fatal issue.

Gastro-Enterostomy.—Dr. N. Senn, while on a recent visit to this city, performed a gastro-enterostomy on a dog at the City Hospital, making use of his bone-plates. The animal recovered and is running around as well as ever.

Drs. Dalton and N. B. Carson have more recently performed the same operation on a juvenile canine; he stood the operation well until puns began to reverberate, when a pained and anxious expression was clearly depicted on his classic features.

M. Pozzi, of Paris, recently performed this operation on a patient, who died the next day. He now agrees with Billroth that the intestine ought to be attached to the posterior wall of the stomach to obviate pressure on it from the colon.

We are informed that Senn's bone plates may be had of Mr. Peterson, of the City Hospital, at half the regular price.

TRANSLATIONS FROM THE GERMAN.

By Dr. W. C. Mardorf, St. Louis.

A New Theory of the Cause of Death.

An Italian, named Achille Malinconico, has come forward with a theory for out-witting the "Grim Reaper" which leaves Brown-Sequard in the shade. He sets forth his views in a brochure, with the brief and modest title, "Trattato sulla Possibilita della Prolongazione Illimitata della Vita Umana" ("Treatise on the Possibility of the Unlimited Prolongation of Human Life"). His theory is very simple and beautiful. Senile degeneration and death are the result of the pranks of a certain microbe, which opposes itself to the renewal of worn-out tissue cells. He has achieved sufficient glory

in formulating his theory, and he leaves the task of unearthing the naughty microbe to a future Koch or a Pasteur. He has also prepared a mixture to cut short the career of the festive microorganism, which from its soul-harrowing title, it is well calculated to do. All that he now asks is the P. O. address of the aforesaid microbe.—*Deutsch Med. Zeit.*

Syphilides of the Lower Extremities.

Secondary syphilitic eruptions of the lower extremities, in patients affected with varicose veins, especially women, often take on an appearance closely resembling purpura, and may make the diagnosis uncertain where the eruption is not general. Varicose legs have a special attraction for tertiary syphilides, and ofttimes the distinction between the latter and the ordinary ulcera cruris is to be made only by specific treatment.—Dr. Raoul in *Le Progo. Med.-Deutsche Med. Zeit.*

Magnesium Silicate in Phthisis.

Ludw. Polyak (Orvosi Hetilap.) reports excellent results from the use of magnesium silicate (salcum venetum) in the stubborn diarrhea of phthisis, as originally recommended by Debove; 200 grams (℥vj) may be given, well shaken with milk, in the course of 24 hours, and this dose may be doubled or even trebled. The effect does not appear until the second day after beginning treatment, and ceases with the discontinuance of the drug. The milk is said to be better relished in this way than when given in its ordinary form, and larger quantities of it may be taken, an advantage which is of no small importance. One disadvantage is that some patients complain of a sense of abdominal oppression after taking the drug for six or seven days, an effect which is to be explained by its heaping up in masses along the intestinal canal.—*Med. Chir. Rundsch.*

On the Behavior of Septic Germs in the Intestine.

Dr. H. Alapi (Arvosi Hetilap.) details the results of experiments which he instituted to determine under what conditions living germs would pass through the stomach into the intestines. His subjects were rabbits, and he used in some cases cultures of the streptococcus pyogenes, which seems to stand in a new relation to peritonitis; in others the streptococcus pyogenes aureus, and in others still the streptococcus of erysipelas. The animals were killed in from one to seven hours after the exhibition of these germs, and the intestinal contents examined. In no cases were colonies of these microorganisms found where the stomach contents were normal in reaction at the time of ingestion.

Where the gastric contents had been previously rendered alkaline, however, a positive result was achieved. From this Alapi concludes that the stomach and intestine of a healthy person do not harbor septic germs.

This fact is of great practical value in cases of fecal extravasation from stab or gunshot wounds of the intestine in a previously healthy individual. From the above results and from the lesson of clinical experience, it is seen that suppurative peritonitis does not at all necessarily follow in such cases; the danger is not so much septic infection, but rather acute septic poisoning from the absorption by the peritoneum of the intestinal contents (ptomaines), and this danger should be avoided by performing an exploratory laparotomy as soon as possible after the receipt of injury, closing wounds of the intestine, if there be such, and carefully cleansing the peritoneal cavity with a weak antiseptic, preferably distilled water.—*Deutsch Med. Zeit.*

Syphilis of the Heart.

Syphilis of the heart is rare and usually manifests itself in changes of the myocardium. That syphilis affects the valves of the heart is a point on which authorities are not agreed. Dr. Ch. Firket relates a case which he believes to have been one of undoubted syphilis of the mitral valve. A woman, æt. 53, came to his clinic at Brussels, suffering with ascites, edema of the extremities, etc. During life no trace of syphilis could be found, but an autopsy revealed unmistakable evidences of old syphilis in the liver, and also waxy degeneration of the kidney and of the mitral valve. He came to the conclusion that this degeneration was of syphilitic origin. The waxy change of the valve caused the loosening and separation of the endothelium over the affected parts, and the surface thus exposed led to the formation of a white heart-thrombus, death ensuing.—*Med. Chir. Rundsch.*

Accidents Occurring With Intra-Uterine Injections.

It seems to be the generally accepted view that intra-uterine injections should not be given during the puerperium unless there are marked indications to the contrary. Dr. L. Roulin, in *l'Union Medicale*, records five cases which seem to confirm this view. In these cases there was no indication for the use of intra-uterine injections, and although precautions were taken to ensure the free outward flow of the fluid, in all the cases there occurred chills, severe pain in the abdomen, bilious vomiting and rises in temperature following the injections. These threatening symptoms came on without regard to the quantity or quality of the fluid used (liquor van Swieten), and although they subsided readily in all the cases, the reporter states that in future he will wait for indications before giving injections.—*Deutsch Med. Zeit.*

The Advantages of Salicylate of Mercury.

The salicylate of mercury is recommended from several quarters as being the best of the salts of mercury,

inasmuch as it is borne better by the stomach, and the difficulties attending its use are not such as are frequently noticed with the other salts. It is said to have decided advantages over the protiodide and the tannate. —*Deutsch Med. Zeit.*

A Quick and Easy Method of Staining Tubercle Bacilli.

A quick and easy method of staining tubercle bacilli is that of Gabbett's in the *Munchner Med. Woch.* The first solution consists of fuchsin, 1 gram, absolute alcohol, 10 grams, added to 100 grams of a 5% solution of carbolic acid. The cover glass, prepared in the usual way, is allowed to remain in this solution for two minutes, after which it is transferred to solution No. 2, which consists of methyl blue, 2 grams, dissolved in 100 grams of a 25% solution of sulphuric acid. After remaining in the latter solution one minute the glass is washed in water and examined in that medium, or better, it is washed with absolute alcohol and mounted in Canada balsam. The bacilli are colored red, the background blue.

Thallin in Gonorrhea.

Dr. Carlos Feixeira, of Rio Janeiro, reports remarkable results from the use of thallin in gonorrhea. He uses the sulphate, and begins with injections of a 1% solution in water. In acute cases this strength was doubled, and at times he used as high as a 5% solution, applying it with the aid of an Ultzmann's catheter-syringe. He observed at no time symptoms of irritation; on the contrary, the disease usually succumbed in a few days. He states that it excels any other method of treatment with which he is acquainted. (*Deutsch Med. Zeit.*) This account is a glowing one, to put it mildly, and more extended trials, with reports of cases, are certainly desirable.

The Action of Strophanthus.

Dr. Livierato, in *La Reforma Medica*, says: In order to test the value of strophanthus, the author made use of the alcoholic tincture in a number of cases of organic disease of the heart, and in fever patients with a tendency to heart failure, in which latter cases he also noted the influence of the drug upon the temperature. From the mass of observations he made, the following conclusions may be drawn: (1). Strophanthus does exercise an influence upon the activity of the heart. (2). Under ordinary circumstances it does not influence the frequency of the pulse. If the pulse-rate be previously high, large doses will lessen the number of pulsations, while at other times the exhibition of the drug will increase the pulse-rate. (3). This influence upon the pulse-rate is independent of any regulation of the functions of the heart. (4). Sometimes it does regulate the pulse. (5). The blood pressure is always increased. (6). This increase may be from a few millimeters up to 40 m.m , and lasts until the drug is discontinued; it is present on the day following, though in a lesser degree. (7). The diameters of the heart are distinctly shortened, and this shortening goes hand in hand with the increase of blood-pressure and the increased diuresis. (8). The greatest shortening is in the longitudinal and oblique diameters. (9). This shortening of the diameters is the more marked the greater the action of the drug develops itself. (10). Respiration is not markedly changed, but at times the number of respirations is increased. (11). The action of the drug manifests itself 15 minutes after its ingestion. (12). Repetition of the doses increases its action. (13). The amount of urine passed in 24 hours increases to 1700 c.c. (57 oz), and more, according to the individual effectiveness of the drug and the size of the dose. (14). Frequently strophanthus is powerless in serious circulatory disturbances, where digitalis and caffein will triumph. (15). In cases where there is no organic heart disease strophanthus will sometimes be utterly unable to affect the blood-pressure and the diuresis. (16). In all the fever cases in which the author used strophanthus he found it to be ineffectual as an antipyretic. (17). In some cases the use of the drug brought on diarrhea, but without any colic pains or other disturbance of the digestive or nervous systems. (18). As high as 40 drops of the alcoholic tincture may be given to adults in the course of 24 hours, and this dose may be repeated for several days without disadvantage. In one case only did the author observe slowing of the pulse without irregularity after protracted use of the drug. (19). In a few cases strophanthus may be given with success, where neither digitalis, caffein, nor still less spartein, may be substituted, although the latter possesses a calming influence over the dyspnea of cardiopathic patients. (20). Strophanthus has no influence npon the peripheral blood-vessels.—*Deutsch. Med. Zeit.*

Syphilitic Diabetes.

Lemonnier (*Annales de Dermat.*) reports the following case: A man, æt. 50 years, had been suffering for an indefinite period with diabetes. There were present from 70 to 80 grams of sugar to a liter of urine (ʒxviij —Oij). His condition was dubious and grew worse from day to day, until the formation of a gumma of the pharynx gave evidence of a syphilis of long standing, the existence of which the patient had denied up to that time. He was immediately put on antisyphilitic treatment, inunctions, and potassium iodide internally. In eight days a decided improvement in the state of the gumma began to manifest itself, and there were but 27 grams of sugar to the liter of urine. Three weeks later the amount of sugar in the urine was inappreciable. It is important to state that during this time the patient made no attempt at following out an anti-diabetic regimen.—*Deutsch. Med. Zeit.*

CORRESPONDENCE.

CURETTING THE UTERUS IN PUERPERAL FEVER.

St. Louis, Aug. 9, 1889,
City Hospital.

Editor Review.—In the Weekly Medical Review of the 13th ult., you quote part of an article by Alexander Duke in the *Brit. Med. Jour.*, as follows: "As I have found the curetting of the uterus so valuable a treatment in chronic endometritis it has struck me that it might be used with advantage in cases of puerperal fever accompanied by offensive discharge."

You then refer to the fact of my having done the operation quite often at this institution.

If Dr. Duke will look up the literature of the subject I am sure he will find that the uterus had been curetted in such cases "many a time and oft" before I did it.

In fact I take it that it has been done for "lo! these many years."

During the past three years I have curetted ten or twelve such cases; all were promptly benefited, and all recovered. I append a few of the more important cases:

Case I. Lizzie F., æt. 22 years, primipara, admitted April 4, 1888. Two days before admission she submitted to an operation which caused her to abort at the fourth month.

Hemorrhage continued off and on until admission, when examination revealed a large, soft, patulous os, and a flabby uncontracted uterus, from which flowed a very fetid, sanguinolent discharge. The temperature was 106.5° F., pulse, 130.

After strict antiseptic precaution I attached the vulsellum to the os, pulling the uterus well down to the vulva, which I was enabled very readily to do, owing to its flabby, relaxed condition.

The endometrium was thoroughly curetted, and a considerable quantity of placental debris was washed out with possibly two gallons of a hot 1-3000 solution of bichloride of mercury, which flowed through a long tube attached to a glass irrigator—the curetting and irrigation being done simultaneously.

After puffing one or two tablespoonfuls of iodoform into the uterus, and packing the vagina snugly with iodoform gauze, I gave her a dose of ergot and put her to bed. In three hours her temperature fell to normal, and was never again above 99° F. Her recovery was rapid and complete.

Case II. Mattie A., multipara, æt. 30 years, admitted May 27, 1889. She had had three children and three miscarriages.

Nine days before admission she miscarried at three months, the accident being caused by heavy work. We found her very pale and weak, pulse 122, temperature 102.5° F. A free vaginal, fetid discharge was noted.

Treatment same as in Case I. Next morning temperature was 100° F., pulse 90. There was very little change for three days, when the pulse and temperature fell to normal, and remained there.

Case III. Mrs. E., æt. 32, primipara; seen in consultation last March, seven days after an apparently normal confinement.

Fever commenced on the second day, and when I saw her it was 106°F., pulse 160. Uterus was at least eight inches in depth, os widely dilated, and discharge offensive. Treatment same as in Case I. I think I do not exaggerate when I state that a double handful of placental remains was scooped out. In six hours her temperature fell to 99.6° F., pulse 110. For some days her evening temperature would reach 101° F., but she made a good recovery.

I believe that if physicians would confine their attentions to one washing out of the vagina after labor (in many cases it is not necessary at all), and let their cases severely alone thereafter, fewer puerperal fever cases would be seen. Of course if we observe a fetid discharge we must use the antiseptic vaginal douche, which in many cases will suffice. Should it not do so, however, we should irrigate the uterine cavity, and, should this in turn fail, the curette is undoubtedly indicated. The operator can generally tell where to curette by finding the soft, baggy portion—the placental attachment—whereas the normal uterine tissue will feel much harder. Should the instrument accidentally invade the normal parts he need not be annoyed, unless he has used undue force, for the endometrium is exfoliated later any way.

Very truly, etc.,
H. C. Dalton.

SOCIETY PROCEEDINGS.

PHILADELPHIA OBSTETRICAL SOCIETY.

Regular meeting Friday, June 7, 1889, the President, Dr. Theophilus Parvin, in the chair.

Dr. Wm. Goodell reported the following history of a case of extrauterine fetation, and exhibited the specimen:

The patient had been married for a number of years without conceiving. Her catamenia had been regular up to the time when they ceased for nearly seven weeks and morning sickness set in. The next monthly period was free for a few hours and then merely a show of blood which lasted several days. During this dribble severe intercostal pains, lasting two hours, followed a movement of the bowels. For several days there was great soreness of all the muscls. At irregular intervals these intercostal pains reappeared and were always followed by much musclar soreness. There were few pelvic pains, nothing like cramps, and Dr. Goodell was called in on account of a continuous dribble of blood which had lasted for three weeks. During this metrothaxis membranes were twice passed, which were supposed to be fragments of an early miscarriage. Dr. Goodell found an irregular tumor to the left of the womb, closely adhering to it and pushing the fundus over to the right.

In view of the history, a diagnosis of extra-uterine fetation was made, and the operation was promptly performed three months after the cessation of the last regular monthly period. There was no appearance of old or fresh blood in the abdominal cavity, such as is usual in many of these cases when rupture has taken place. But of course blood escaped during the breaking up of numerous adhesions to the rectum and the broad ligament. The specimen shows the left ovary and the corresponding tube greatly enlarged by a deposit of placental tissue. Dr. Osler, who was kind enough to examine the specimen for me, states that the chorion villi are unmistakably present. No fetus was discovered, but it may have perished and become absorbed, or it is possible that itmay have escaped into the abdominal cavity through an opening made accidentally into the sac, during the process of enucleation. So vascular was the sac that a stream of blood spurted out from this tear as if it came from a large vessel. Apart from a nervous attack of vomiting, which lasted nearly twenty-four hours, the convalescence was uninterrupted.

DISCUSSION.

Dr. J. Price.—I am satisfied that Dr. Goodell's explanation of the absence of the fetus is correct. I could cite two or three cases and an experience of my own which supports this view. Mr. Tait's first two cases made tedious recoveries, and in both he failed to find the fetus. Some time ago I did a section with a doubtful diagnosis. Some one standing by asked me what I expected to find. I replied, "One of twelve things." I went on and removed a large adherent tube, ruptured, with the abdomen pretty well filled with clot. I then irrigated the abdomen. After using one pitcher, the water returned perfectly clear. To make the toilet thoroughly satisfactory, I used the second pitcher of water, and, in finishing the second toilet, washed out a little boy. In this case I am satisfied that the peritoneum could have taken care of the fetus by digestion, as probably occurred in Mr. Tait's case.

Dr. Howard A. Kelly.—I think that this case illustrates how readily we can make a satisfactory diagnosis, given symptoms being present. With a certain order of symptoms and signs we can with the utmost certainty diagnose extra-uterine pregnancy in a certain proportion of cases. In another large proportion of cases, it is a matter of mere conjecture, until the abdomen is opened. I operated this week on such a problematical case, one of the two possibilities being extra uterine pregnancy. Such proved to be the condition, although no fetus was found. I found the sac and the placenta within the ruptured tube.

In a recent book on this subject by Strahan, he unfortunately fails to notice some experiments on the disappearance of the fetus after its expulsion into the abdominal cavity. Leopold has experimented by introducing fetuses into the abdominal cavity of dogs. These have have been digested, until the period of the more distinct development of the bony tissues has been reached. After that period they have become sources of irritation and have been cast off by suppuration.

Dr. M. Price.—I do not think that a study of the cases on record will make a man perfectly satisfied that he can say when he has a case of extra-uterine pregnancy. The ablest men throughont the world have satisfactorily decided that question. They have made mistakes time and time again. They have cut for supposed extra-uterine pregnancy and found something else. They have cut for something else and found extra uterine pregnancy. It is very difficult to decide until the abdomen is opened.

A ruptured extra-uterine pregnancy can only develop in the broad ligament. If it ruptures into the peritoneum, there is not a single case on record where, if the operation is delayed a number of days, the fetus has not disappeared. Hundreds of cases are on record. I have, myself, seen eight or ten where the fetus could not be found, where the microscope positively showed the presence of extra-uterine pregnancy. Those cases that go on to development are those in which there has been first a rupture into the broad ligament, and then development up to a certain time when the child can resist the digestive action of the peritonæum.

I would ask if this woman or any other woman with extra-uterine pregnancy could be benefited by electrical treatment. There is no question in my mind that in these cases electricity has done a vast deal of harm and has aggravated symptoms already existing and has imperiled the woman's life to a greater extent than if she had been left entirely to nature. The knife, as Dr. Goodell has used it, is the only treatment. Delay is not justifiable at any period, unless when the case comes into the hands of the surgeon the child has passed to that degree of development that warrants its being left to the period of viability. All of these cases demand operative procedure at an early period, if they come into the hands of the operator.

Dr. William Goodell.—I fully agree with the remarks of those gentlemen who hold to the uselessness of electricity. I think that there is only a single class of cases of extra-uterine fetation in which electricity might be valuable, and that is in the early weeks before hemorrhages have occurred. An examination of the specimen before us shows, to my mind, that hemorrhages must have taken place in the tube forming layers of organized clot. In such cases I do not see how it is possible for electricity to do anything but harm. In those occasional rare specimens in which the chorion has remained intact, resembling an absorption coming away without rupture, the ovum being nothing more than a delicate, but shaggy bladder, with the fetus inside, I can understand how electricity could do good by destroying the life of the fetus. Then everything might readily become absorbed; but as we can never know positively beforehand whether or not hemorrhage has occurred, my own feelings are in favor of immediate section.

While the difficulties of diagnosis are undoubtedly very great, this need not interfere with our treatment. We find a woman suffering from certain pelvic symp toms and we discover an extra-uterine tumor of some kind. Now, a painful pelvic tumor must be removed, wherever it is. The only change in the treatment would be to hasten on the operation were the symptoms pointing in the direction of extra-uterine fetation.

Dr. Howard A. Kelly read the report of a case of cholocystorrhaphy followed by cholocystotomy and evacuation of one hundred and eighty-eight gall-stones, and recovery.

Operative procedures practised upon the gall-bladder must always remain among the rarities in abdominal surgery, on account of the difficulties attending correct diagnosis, and the technical difficulties of treatment.

The indications for operation are also more rarely found in any intrinsic disease of the gall-bladder, but pertain rather to disease elsewhere, whether through the formation of calculi or stenosis of the common gall-duct, by which the bladder itself is transformed into a retention cyst.

And inasmuch as this is the chief characteristic of the disease, it also forms a very important factor in accounting for the failure of the operation to cure the patient of all disability, and to accomplish more than a mere technical operative success.

Technique. Inasmuch as the operation becomes one for the evacuation of the contents of the gall bladder or common duct, the technique of the operation involves an answer to a simple question, "What is the safest method of opening the gall bladder, and the safest after-treatment of the wound thus made?"

Under pathological conditions the contents of the gall-bladder are often irritating, and must be carefully excluded from the peritoneum.

The plan which I adopted in the following case is applicable to a certain percentage of all cases, and will yield excellent results wherever similar anatomical conditions are found.

The steps are:

Incision through the abdominal walls at that point at which the gall-bladder or its notch in the liver are to be felt most prominently.

Suture of the gall-bladder to the margins of the incision.

Evacuation of its contents, either immediate or after the visceral and parietal peritoneal surfaces have united.

This preliminary suture of the gall-bladder to the abdominal wall, excluding the peritoneum for danger of septic influence, fixing the gall-bladder, and providing for the subsequent escape of its contents by a fistulous track, is a step in the technique, with its own technical peculiarities, of such importance that I have dignified it by name of "Cholocystorrhaphy."

The application of the principles involved will be developed without further discussion in the account of following case:

Frau B., a weazened, brown-skinned, little German woman, æt. 50 years, is the mother of a number of children, and aside from a single attack of jaundice when æt. 30 years, enjoyed good health up to twelve years ago, when she lay many weeks abed with a severe febrile attack diagnosed as typhoid fever. She noticed at the same time the appearance of a well-defined tumor in the right hypochondrium. Since this time she has always been a sufferer with abdominal pains, indigestion and constipation. The pains, although not located in any particular spot, were very definitely referred as arising from the right side.

She suffered from menorrhagia two years ago, for which I was called in consultation by Dr. A. K. Minich, a year ago. After dilatation and curetting and a course of arsenic preparations by Dr. Minich, this disappeared and she improved very markedly in every way.

Last January (1889) I was again called in consultation by Dr. Wintter to consider the nature of her abdominal complaint.

The lobes of a distinctly enlarged liver, also displaced downwards, 10 cm. below normal, with a gall-bladder greatly distended, elastic, and projecting far beyond its fissure, were easily detected, and the diagnosis of obstructed gall-bladder made.

I operated on January 28, in the presence of Dr. Wintter, assisted by Dr. Hunter Robb. As the liver was freely movable, and the gall-bladder lay 3 cm. to the right and 4 cm. above the navel, an incision 4 cm. long was made in the linea alba. It was found to be a large, tense cyst about 13 cm. in length. Upon palpating the rest of the abdominal viscera through the opening, I found extensive mesenteric, small intestinal and colonic adhesions, made up partly of the union of broad surfaces and partly of sharp bands from 4 or 5 to 10 cm. in length. These were all carefully separated and broken up by the fingers used as a wedge between the broad adhesions, and bringing the sharp bands into view when they were cut. The oozing which followed this separation was but slight. The next step was to suture the gall bladder to the abdominal wall, so as to expose a part of its surface for subsequent incision. This was done by means of a series of fine interrupted silk sutures about an eighth of an inch apart, introduced so as to catch up the serous and subserous coats of the bladder and the visceral peritoneum.

The completion of the operation left a small wound, at the floor of which lay exposed a part of the gall-bladder, 3 by 1½ cm. The whole operation lasted to completion ten minutes. Iodoform gauze was placed in the wound, and absorbent cotton and bandage over the whole. On the third day the dressing was removed and the exposed bladder opened in its length by Paquelin's cautery knife. About 300 gr. of clear, sticky fluid like synovia escaped. On the fifth day I removed one hundred and six gall-stones of varying size by means of a pair of small stone forceps. Three days after forty more were removed, and on the eleventh day forty two more stones appeared. A stillicidium of fluid com-

menced with the opening of the bladder, and lasted eighteen days, when the wound closed. The length of the gall-bladder measured by a sound was 11½ cm. On the twelfth day she sat up, and on the twenty-sixth day she went home. The relief following the operation was perfect. She had no more pain, recovered her appetite, and became bright and cheerful in disposition.

[TO BE CONTINUED.]

SELECTIONS.

CURE OF THE FALSETTO VOICE.

BY J. C. MULHALL, A.M., M.D., L.R.C.S.I.,

Professor of Diseases of Throat and Chest, Beaumont Hospital Medical College; Physician for Diseases of Throat and Chest, Alexian Brothers' Hospital, St. Louis.

Read betore the American Laryngologcal Society, September, 1888.

At puberty, voice in man, as every one knows, undergoes a remarkable change. Its timbre and intensity may remain the same, but the pitch becomes much lowered; the purile becomes musculine.

In some this change occurs quite suddenly, in more the transformation is gradual, but in a very few, though puberty be fully established, the voice remains unaltered, or, more usually, its pitch becomes higher—reaches the falsetto; the boy is man in every thing but his voice.

Very frequently this condition undergoes spontaneous cure. At a period of uncertain length after puberty—is may be months, it may be years—the lad in some vo cal effort, hitherto untried, finds that the voice of a man issues from his chest. He repeats the experiment, and the heretofore unused,or misused,muscles which control the lower register, having once felt the stimulus of action, automatically respond to future exigencies.

More rarely—indeed, this condition is quite a rare one—the falsetto voice persists beyone the second into the third decade when social and business interests begin to cluster about the man, and his condition is made a very humiliating one.

Until recently I was under the impression that every laryngologist was familiar with this anomaly and its cure, but the history related to me by my last patient, of various attempts made in this direction, convinced me that I need not apologize for the introduction of the subject at this meeting, further fortified by the fact that, within my knowledge, the theme has received but little attention in literature.

Mr. S. G. F., banker's clerk, æt. 25 years, until within sixteen months a resident of Washington, D. C., but for the period mentioned an inhabitant of St. Louis, consulted me with regard to an infirmity of the voice in November, 1887. His statement made in quite a high falsetto voice key, revealed the fact that he had never yet talked in any other manner, with the following exceptions: He had occasionally rendered monosyllabic imitations of his brother's deep basso voice, but he had been warned to avoid this, for fear of injury to the vocal apparatus.[1] He had never yet uttered a complete sentence in other than his present squeaking, puerile voice. He felt sure that his voice was of higher pitch than previous to puberty.

There existed a partial, not a lateral, exception to this latter assertion. Direct questioning elicited the important and instructive fact that, in laughing, the voice was of low pitch, as in other men. He had quite given up hope of relief, inasmuch as a specialist of repute at his own home having unsuccessfully treated him during several months, had then called in consultation a veteran and distinguished laryngologists from another city, who could, however, suggest no other therapeutic measure than the one chiefly employed, namely, electricity. He had further consulted another laryngologist in a large Eastern city without avail. He was told uniformly that the trouble was of a paralytic nature, and given an unfarvorable prognosis.

Instrumental examination revealed a condition, crudely speaking, of perfect health of the air-passages. He was in all respects a normal individual, including his genital organs. It is a matter of common knowledge that boys who have been castrated—the eunuchs of the East—maintain their puerile voices after the age of puberty, and it has been written that as late as in the last century choir boys with fine voices suffered castration that their high tenor or falsetto voices might remain unchanged after puberty to serve in the choirs of cloistered orders of monks. The general public, acquainted with these facts, is prone to consider that a full-grown man with a falsetto voice must be lacking in genital development.One of my patients insisted on proving to me that he was not deficient in this respect. I need not say that the public is entirely wrong in the suspicion[2]

Observation with the laryngoscope proved, in the patient in question, that, far from their being any paretic condition present, the true and false cords during fonation approximated more closely than they should have done; an observation proven by comparison in the same individual a few moments later, when his falsetto voice had given away to a normal baritone. it could then be readily seen that the vocal chink was now much larger; that the whole larynx was lacking in the muscular tenseness which had characterized the vocal attitude of the falsetto voice. The patient was told with an air of confident authority, after careful and prolonged laryngoscopic examination, that his vocal apparatus was in a condition of perfect health; that the error was purely physiological, and consisted in the faulty use of his voice, and that he would leave the consulting room cured of his falsetto tones. This information was given in this confident manner that it might carry conviction; that it might stimulate the nerve element involved to a correct performance of function.

[1]Nature asserted itself, but was promptly suppressed.

[2]The matter is embarrassing to the patient, who is conscious that the public suspects him to be a eunuch.

The chin of the patient was now depressed on the sternum, this being done for its mental effect rather than to relax tension or depress the larynx; and whilst in this position I uttered a low gutteral, and asked the patient to imitate me, which he at once did. His atten tion was then drawn to the fact that he could utter low tones. His head being again depressed, he at once readily imitated my low tones in counting. A conversation ensued, his confidence was established, and the cure almost accomplished. The patient must, however, be assured that his newly acquired voice is proper to him, for at first he can scarcely believe that the unfa miliar tones form his normal voice.

In a word the remedy consists in telling the patient that he has a normal voice, and by some device proving it to him. For the first few days, unless the patient fixes his attention on each vocal effort, he is apt to commence a sentence in his former falsetto key.

My patient was, therefore, requested to stay at his lodgings for two days to escape business diversions, and concentrate his attention on his voice; to practise speaking and reading aloud. At the end of this time he found that even when his mind was diverted from his voice, that he spoke quite naturally. At the end of three months, on being requested to speak in his former falsetto key, he found himself utterly unable to do so.

I have thus far had three cases, their history and cure being similar. In my first case, occurring fourteen years ago, I noticed that the individual spoke in falsetto tones, but laughed in quite natural ones, and it was the clew to my successful theory and treatment. It occurred to me that laughing was a natural act, articulate speech an artificial one, the product of imitation and training. It therefore suggested itself to me that the artificial tone of speech could be trained to imitate the natural one of laughter.

The muscles at physiological fault are undoubtedly the thyro-arytenoids, from the physiological fact that they are the internal tensors of the larynx, and from the clinical fact that in my cases the ellipse between the cords during vocalization was much larger after restoration of the normal voice.

This belief is further strengthened by laryngoscopic observations in a totally opposite class of cases, to which also—indeed little, if any—attention has been made by authors, namely, paralysis of the thyro arytenoids in adults, caused by excessive use of the high register before puberty.

I have been consulted by two gentlemen for voice troubles whose history was identical. In both, direct questioning drew forth the history that there had been habitually excessive use of the high register for two or three years before puberty; in the one case in singing, and in the other in elocution. At puberty both found their voices changed, to become husky, very deep, rough, incapable of maintaining so long a sentence without inspiring, as before puberty, so aptly termed phonative waste of breath, and both unable, without any effort, to reach a note higher than the middle register of a baritone.

Their ages at the time of observation were, respectively, twenty-seven and thirty-two. Their voices had undergone no change from the one into which they passed at puberty. In both the vocal ellipse was very large, the sickle shape of the cords during phonation being well marked. There existed the well-known clinical picture of paralysis of the thyro-arytenoidei.

My purpose in mentioning this class of cases is to offer the conclusion that if, in the one, the subjective and objective signs collectively be the exact antithesis of those in the other, and it be admitted that in the one paralysis of the thyro-arytenoids be the exact diagnosis, hyper-tension of the same muscles must be chiefly concerned in the emission of the falsetto voice.—*Am. Jour. Med. Sc.*

REFORMATION IN THE PRACTICE OF MEDICINE BY THE DOSIMETRIC METHOD OF TREATMENT.

BY J. E. MACNEILL, M.D., DENVER, COL.

The Dosimetric method in the practice of medicine, that is the method of small doses of the active principles of plants mathematically measured and scientifically adapted to the varied abnormal conditions was originated by the illustrious and venerable Dr. Burggraeve, of the University of Ghent, some twenty years ago. The method so boldly and ably promulgated from a source so eminent, attracted the attention of many of the ablest and brightest physicians in various portions of Europe, who very soon gave him their most earnest and loyal support. Strengthened by the consciouness of the advantage of the new method over the old systems of practice in the saving of life and suffering, and in the maintainance of health and longevity, Dr. Burggraeve, after years of effective labor in perfecting the method and in educating both the profession and the people up to it, assisted by his very able and earnest colleagues, is now rewarded by the knowledge that 11,000 of the most advanced an influential physicians in Europe and America are Dosimetrists (including one-fifth of all the physicians in France) with a clientage of about 20,000,000 of patrons and adherents. The enormous and rapid extension of Dosimetry in comparatively so short a time, sufficiently attests the great favor and popularity with which it is received wherever introduced. Its usefulness and success in the cure of disease and in the maintainance of health among its patrons is its own recommendation. Quietly, yet surely and rapidly, it is coming to be recognized as the only absolutely safe, accurate, scientific and reliable method of practice.

The substances used in the practice of Dosimetry are the active principles of the plants, and are for the most part the crystalized alkaloids or the glucocides. The

granules contain accurately weighed quantities of simple substances whose chemical composition is invariable, whose effects are always the same, and are such that they can be calculated with great certainty in advance. The medicaments or granules used by Dr. Burggraeve and his followers are prepared exclusively by M. Ch. Chanteaud & Co., the eminent and skillful pharmacists of Paris, and are always uniform in strength and efficiency. From the first, M. Chanteaud has been an active co-labor of Dr. Burggraeve, and is the founder of Dosimetric Pharmacy, the reliability of whose preparations has so greatly added to the wonderful effectiveness and marvellous success of Dosimetry. Each granule contains, according to its medicament, a half milligramme or one centigramme of the active substance, protected by sugar or milk.

These quantities correspond to $^1/_{130}$, $^1/_{65}$, and $^1/_6$ respectively of a grain English, and are administered in quantities one or more, as may be required by the age or condition of the patient. They are rapidly dissolved by the juices of the stomach, and are absorbed within ten or fifteen minutes, so there is no possibility of an accumulation as sometimes happens with pills and other preparations ordinarily prescribed in doses too large, or of medicines not readily absorbed or assimilated, thus avoiding all danger of any cumulative and dangerous effect, especially as there is in the Dosimetric treatment a lavage intestinale every morning by taking a small quantity of Seidlitz Chanteaud, which has the triple good effect of acting on the digestive tract, on the kidneys and on the skin.

Dr. Burggraeve early established some simple rules of treatment, simple in form, but of the greatest value in practice. In each disease he distinguishes two periods, the first, or dynamic, presenting only functional disturbance; the second, or organic, accompanied by a change of tissue.

It is in the first period that the Dosimetric physician uses the most active means possible to jugulate the disease, that is to cause it to abort. From this Dr. Burggraeve educed his rule to give to an acute attack an acute treatment, and to repeat the small doses frequently until the desired effect was obtained, independently of the quantity of medicine administered, thus doing away with the idea of maxima and minima, which have been regarded as axioms, and which are as great hindrances to success as are the massive doses currently employed for certain drugs. Small drugs facilitate the absorption of the medicine and make it certain that the needed quantity shall not be exceeded. The disease may be considered as a resistance to the remedy, or a resistance of the human organism in a state of disease to the remedy.

The dose should therefore be adapted to the morbid resistance. The adaptation cannot be known beforehand. The organism and the condition of the patient can alone indicate it. The dosimetric physician has thus the route he is to follow clearly placed before him by the imperious indications of the facts in the case. He is in no danger of an imprudence by giving too much of the remedy, because he stops or gives it less frequently when the useful effect he aims at begins to be accomplished, and on the other hand, he is not held back in his treatment by timidity, for he is guided by Dr. Burggraeve's invaluable rule to continue giving the remedy until a useful or sufficient effect is obtained, that is, a result which is sensible to the patient or appreciable by the physician.

One granule too few may prevent the desired effect; one granule too many, by increasing that effect can do no harm.

There can be no exact treatment without an exact clinical knowledge and an exact remedy. The exact remedy can only be had in alkaloids or active principles of medicinal plants.

If the hesitation that some physicians manifest to the use of the alkaloids proceeds for the fact that they regard them as poisonous, this may be justified to some extent for the reason that in allopathic practice examples occur frequently of poisoning by their use from an incorrect estimate of their strength or from careless or inefficient prescribing.

Not so, however, in dosimetric practice, as, in all of the many hundreds of thousands of cases so treated since the foundation of this method, not a single case of poisoning has occurred or can be cited. In dosimetry, poisoning is "materially impossible" says the eminent Prof. Laura, of Turin, and of the School of Medicine of Paris. This distinguished physician, teacher and scientist also says in his "Pharmaco Dynamie Comparee," recently published, that his life for twenty-five years has been devoted to the hospitals, to instruction, and to private practice. During eighteen years of this time he followed the rules of the regular school of medicine, but for the past seven years he has devoted himself to the study and practice of dosimetry exclusively. He says that he is profoundly and seriously convinced that this new dosimetric method is a grand progress in the science and art of medicine, that it restores to the physician an abiding faith in the curative powers of his art, while it spares him the dangers of an excessive treatment, and that it renders to suffering humanity services much superior to those of ordinary medicine."

Within the ranks of Dr. Burggraeve's followers are already numbered many of the most eminent physicians of Europe, who are constantly adding to the popularity of dosimetry by their large and successful experience, patient research and valuable discoveries. Special consideration is due to Dr. Fontaine, of Bar-sur-Seine, who has deserved well of humanity, and especially of parents, in discovering a treatment as simple as it is infallible for croup, and in general for all those diphtheritic and contageous affections so prevalent and so fatal among children. Dr. D'Oliveira Castro, of Madrid, another distinguished physician and scientists, in his interesting and instructive "Elements of Therapeutics and Practice" (Republished in translation in 1888) conclusively attests the great superiority of dosimetry over all

other systems of practice in the successful treatment of all contagious and other diseases of childhood and adult life. Thanks to the dosimetric granules so active despite their small size (but which bear no relation whatever to homeopathic globules) the physician knows with mathematical certainty what he is doing for his patient. If he is called in time, the varied forms of pneumonia and the gravest attacks of pleurisy will give way in a few days.

Typhoid fever will disappear in one or two weeks under early dosimetric treatment, leaving none of its dreaded tedious sequelæ so common under the ordinary treatment, whilst all the eruptive maladies, small-pox, scarlet fever, measles, etc., being no longer influenced by feverish conditions or cutaneous irritations will follow their course without danger to the patient. The fact is worth something also that patients treated by the dosimetric method escape the nauseating and excessive dosage of the allopathic system which is too often so serious a hindrance to their successful treatment. Thus, too, they may also escape the illusionary treatment of the homeopathic school. The dosimetric granules are elegant, easily taken and readily assimilated, perfectly agreeing in all cases with the most sensitive stomachs, and are veritable "Arms of Precision" in the treatment of disease, the patient, young or old, scarcely realizing that remedies the most powerful and potent in the cure of disease are being administered. The "Expectancy Method" of treatment of the old schools—expecting the patient to recover or die before the physician recognizes exactly what the condition is or is to be, and therefore leaving him undecided as to the exact treatment required, or causing him to neglect the proper treatment—is utterly repudiated in dosimetric practice. In dosimetry treatment is commenced at once by remedies exactly suited to the existing condition, and in doses exactly and scientifically adjusted thereto.

No time is lost (often a factor of the greatest importance) in sending to a drugstore for some nauseating mixture that the chances are will not be properly taken when obtained, and the risk is entirely obviated of not getting what the physician orders or the patient will not take whether suited thereto or not. The great majority of children instinctively refuse to take medicines as ordinarily prescribed. Adults, impelled both by reason and instinct, in large proportion of cases are equally intractable

The dosimetric method of treatment is prompt in action, decisive in results and entirely agreeable to the patient, factors that in themselves often decide the question as between life and death. In a word dosimetry combines all the merits and advantages (and many more) of the other systems of practice and rejects their disadvantages, errors and fallacies. Among intelligent clases it is rapidly becoming the preferred and popular practice, because of its prompt and superior results. This is more especially the case in Europe, where it has longer been known, and where the most eminent and progressive physicians have, by observation and experiment, become convinced of its great superiority over all other systems of practice, and are adopting it as the one common basis upon which the various conflicting schools and theories of practice can unite. In a word, quoting the eloquent remark of Prof. Laura, "Dosimetric medicine is enjoined upon us as a duty."

Since writing the foregoing, I have learned that some of the most distinguished physicians of the French Academy of medicine have pronounced in the strongest and most unqualified manner in favor of alkaloidal medication. I quote from the official reports, Feb. 3, 1889:

"Professor Germain See closed his communication upon the cardiac medicaments with the following conclusions: To fill the therapeutic conditions, the essential principles of plants, that is to say, the alkaloids and the glucocides, have an incontestable superiority over the plants themselves. * * * In all cases we may do without the plant, which is an irregular mixture, dangerously variable. But we can never do without the essential principle, which is fixed and chemically defined, and may be formulated with precision; the choice between the two cannot be a matter of doubt:"

"At the same session of the Academy, Prof. Laborde read a long communication upon alkaloidal therapeutics in which he arrived at the following conclusions:

"1. In every medicamentous preparation taken from the vegetable kingdom, there exists one or several active substances through which it exercises its physiological and therapeutic action.

"2. When this active substance, if it have one, has been isolated, determined and chemically formulated—in which case it must be regarded as its proximate principle—it is this to which it would be reasonable for us to address ourselves, with a view to its therapeutic use, after having first subjected it to experimental, and then to rigid clinical tests.

"3. In fact, whilst the proximate principle is always the same, identical with itself, invariable in its ensential constitution, as in its fundamental, physiological and medicamentous action, the substance of the entire plant is essentially complex and variable, not only in its composition, but in its effects, and it does not and cannot result in actions which shall be other than multiple, diverse, undefined and unknown."—*Dosimetric Med. Review.*

ETIOLOGICAL TREATMENT OF COUGH.

With regard to the varieties of non-expectorant cough, may first be mentioned simple irritation of the respiratory tract without secretion. The indication here is to turn the dry cough into an expectorant one as soon as possible; and among other remedies use tartar emetic in small doses in water.

This cough is frequently present in chronic and acute bronchitis and in phthisis. The co-existence of some secretion and more or less expectoration, may lead one to overlook the non-expectorant cough. When there is

an undue amount of the neurotic element, I give chloral and morphine, which combination is preferable to morphine alone. It should be remembered, however, that these are drawbacks rather than advantages so far as the expectorant cough is concerned.

A second variety of useless cough arises from inflammatory pharyngeal irritation, and is common in ordinary colds, and in advanced phthisis. The irritated parts may be benefited by the application, with a brush, of morphine mixed with starch, or by obtaining the specific effect of aconite on the mucous membrane.

Another variety of useless cough occurs in irritation of the pleura. This origin of the cough deserves special attention. The physician should adopt appropriate treatment to cure the pleuritic affection and avoid its results.

A further variety of useless cough is the malarial type which is seen in children at night, and suggest whooping cough. Quinine is indicated.

Another variety is the nocturnal cough of children, due to intestinal irritation, as from worms, etc. The indications are plain.

A seventh variety is called uterine cough, but the uterus need not itself be diseased to bring it about. It is seen also in hysterical women. When the uterus or its appendages are diseased they should be treated accordingly ; and when the hysterical element predominates, valerian, bromides, etc., should be given. A purgative is often indicated.

The aneurismal cough is best relieved by morphine, but it is surprising how often it can be warded off by a couple of leeches to the sternum. Then there is the use less cough due to pressure of an enlarged bronchial gland upon the pneumogastric. When the gland softens the cough and vomiting will both cease, but relief may be obtained in the meantime by dry cups between the shoulders.

Foreign bodies in the auditory canal are a cause of reflex cough.

There is also the useless cough from irritation of the phrenic nerve, from perihepatitis, etc.

Cerebral cough is of importance, and is likely to arise from disease at the base of the cerebellum, from abscess, etc., pressing upon the medulla. The indications for treatment of expectorant coughs are to make the phlegm so liqnid as to flow easily, and to make the cough sufficiently powerful to prove effective. The third indication, present in some cases, is to diminish superabundant secretion.

The commonest indication in bronchial cough is to make the bronchial secretion more fluid, and the best indicated agent for this purpose is oil. All oils increase the watery flow from the mucous membranes, and I have learned by experience that the most effectual for increasing the flow from the bronchial mucous membrane is linseed oil, It is best taken in emulsion, which is made in quantity by thoroughly mixing the following ingredients :

Linseed oil, fifteen ounces; oil of wintergreen and cinnamon, each two drams; powdered acacia, ten ounces; water, twenty-four ounces; glycerin, five ounces; simple syrup, ten ounces; dilute hydrocyanic acid, two and one half drams. Half an ounce constitutes a dose. I sometimes add to each dose three minims of Magendie's solution of morphine and eight grains of chloral hydrate.—*Med. Standard.*

THE THEORY OF SUPPURATION.

The bacteriological theory of suppuration, as it is at present accepted, will, doubtless, admit of many modifications before it can reasonably be held to be perfect. Future researches may demonstrate the relative unimportance of the micrococcus as a pus producing agent, and overthrow all the present theories, even as the theories of the past generation have been overthrown. Prof. Paul Grawitz, of Greifswald (*Arch. f. path. Anat. und Phy. und f. klin. Med.*, cxvi, 1) by proving that suppuration may be caused by the injection of irritating substances unaccompanied by any micrococcus or ptomaine, has, perhaps, taken a step in this direction. The experiments were performed mainly on dogs. With the most careful aseptic and antiseptic precautions, a certain quantity of oil of turpentine was injected subcutaneously, and the wound was closed with collodion. Over this a dressing was placed. A swelling with the external characteristics of an abscess was produced which, when opened, was found to contain a pus-like fluid smelling decidedly of turpentine and perfectly free from pus cocci.

This demonstration is interesting because it indicates a possible danger which may arise from the subcutaneous injection of irritant fluids even under the strictest aseptic precautions, but we do not see how it can have great weight regarding suppuration as it is commonly met with, because practically we do not find abscesses of this nature. It proves that substances exist in addition to the ptomaines of the micrococci, which when introduced into the tissues will produce inflammation with the formation of pus, but it does not in the least intimate that the ptomaines do not usually occupy the position held by the turpentine in the experiments as exciters of suppuration.

Grawitz also calls attention to the fact that the resisting power of the tissues of different genera of animals to the action of a given micro organism differs widely, and insists that more attention should be paid to this when deductions regarding suppuration in man are drawn from observations on the lower animals. His remarks would be much more apposite if the question were, "What is the action of a certain micro organism on the tissues of man?" But this is not the question. If we grant what he says to be true, still the fact remains that in all animals the destructive process known as suppuration is found accompanied by some micrococcus. That the particular micro organisms differs in the different genera does not preclude the possi-

bility of arriving at a very close approximation to the truth regarding the action of the micro-organism constantly present in human pus, by careful observations of the micro-organisms that are constant in similar conditions in various genera of the lower animals. Still, analogy is not always a safe guide, and Professor Grawitz may be right in his caution. His work bears the mark of much labor, and, though his results are decidedly theoretical rather than practical, they are worthy of notice.—Ed. *N. Y. Med. Jour.*

EXPOSURE OF THE PROSTATE AND BASE OF THE BLADDER BY PERINEAL INCISION.

Zuckerkandl (*Wein. Med. Presse*, Nos. 21 and 22. 1889) describes a new incision for operative procedure requiring access to the base of the bladder and the prostate gland. The patient is placed in the lithotomy position, and a two and a half inch incision is made transversely across the perineum, a little over an inch in front of the anus. From the two extremities of this cut the knife is carried backward and somewhat inward toward the middle line for an inch and a quarter. This flap is dissected up until the prostate is exposed, it is then turned back, carrying the anus and rectum with it, and exposes the trigone, vasa deferentia and seminal vesicles. By drawing the rectum backward the peritoneum is put upon the stretch, and can readily be pushed up, so that the whole posterior wall of the bladder is subject to careful examination.

The advantages of this method are:

1. By an incision which divides only skin and superficial fascia, the fundus and posterior wall of the bladder are rendered accessible.

2. The bladder is so exposed that removal of tumors seated in its posterior wall is peculiarly facilitated.

3. The operation is entirely extra-peritoneal.

4. The portion of the bladder exposed is that for which bladder tumors have a distinct predilection.

5. The position of the wound secures perfect drainage.

Langenbuch's method of reaching the bladder in the pubic angle, below the symphysis, is open to the objection that sufficient room is not given for operative procedures, the prostatic plexus of veins is subject to lesion, and drainage is no better than in the high operation.

Neihaus (*Cent. f. Chir.*, 1888, 29) exposes the lateral walls of the bladder by a temporary osteoplastic resection.

Helferich makes a very free exposure of the anterior bladder wall by a partial resection of the symphysis.

Koch removes a quadrilateral piece from the symphysis.

Rydygier recommends lapara-cystotomy, with subsequent suturing of the peritoneal bladder incision.

Whatever the method by which the bladder is reached, if its wall is found infiltrated with malignant growth the entire affected part should be resected. Sonnenberg has successfully resected two thirds of a carcinomatous bladder, and the only excuse for any operation directed against the tumor is that it shall be radical.

Rules for the Prevention of Consumption.—The board of health has followed up the report of its pathologists on the contagiousness of tuberculous diseases with the publication of a series of rules to be observed for the prevention of consumption. The first directs that the sputa of suspected consumptives should be received in earthen or glass dishes containing a solution of bichloride of mercury, 1 to 1000. The other rules are as follows:

2. Do not sleep in a room occupied by a person suspected of having consumption. The living rooms of a consumptive patient should have as little furniture as practicable. Hangings should be completely avoided. The use of carpets, rugs, etc., ought always to be avoided.

3. Do not fail to wash thoroughly the eating utensils of a person suspected of having consumption as soon after eating as possible, using boiling water for the purpose.

4. Do not mingle the unwashed clothing of consumptive patients with similar clothing of other persons.

5. Do not fail to catch the bowel discharges of consumptive patients with diarrhea in a vessel containing corrosive sublimate one part, water one thousand parts.

6. Do not fail to consult the family physician regarding the social relations of persons suffering from suspected consumption.

7. Do not permit mothers suspected of having consumption to nurse their offspring.

8. Household pets (animals or birds) are quite susceptible to tuberculosis; therefore do not expose them to persons affected with consumption; also do not keep, but destroy at once all household pets suspected of having consumption, otherwise they may give it to human beings.

9. Do not fail to thoroughly cleanse the floors, walls, and ceilings of the living and sleeping rooms of persons suffering from consumption at least once in two weeks.

Ten thousand copies of these rules are to be printed for distribution.—*Boston Med. and Surg. Jour.*

Local Application of Chloroform in Epididymitis.—Dr. Theodor Clemens of Frankfort, in an interesting paper communicated to the *Allgemeine Med. Central Zeitung*, describes the great benefit he has obtained in cases of epididymitis, both specific and non specific, by means of chloroform locally applied. He regards as most unsatisfactory the treatment of the affection by other methods as compared with his own, which he has employed now for a great many years. It consists in laying some cotton wool saturated with chloroform and spirits at the bottom of a large glass vessel, into which the genitals are then put and packed round with dry

cotton wool, the buttocks and thighs forming a cover, this application being continued for from fifteen to twenty-five minutes, and repeated two or three times a day. Pathologically, he considers venous congestion of the epididymis and the cord through retention of semen a predisposing cause of the disease. He also considers epididymitis as very likely to occur when gonorrhea has been contracted in excessive venery. He mentions a case of treatment by chloroform thirty-six years ago, not of epididymitis, but of periodical "heat" occurring in the human subject.

The man used to suffer periodically from a form of orchitis, during which the testes felt hot and swollen, and the plexus pampiniformis was full and turgescent like a varicocele. He was ordered the local application of chloroform three times a day, from fifteen to twenty-five minutes each time, but the first time he bore the chloroform for nearly thirty-five minutes, after which the pain of the severe attack completely ceased and the swelling considerably decreased. This treatment lasted three days, during which time he was able to walk about, the cotton wool which had been used for the chloroform being put into the suspensory bandage and the testes covered with it. After that both the swelling and sensibility disappeared.

Another case is mentioned, where epididymitis had been caused by the continuous pressure of a rudder handle on the hypogastrium, in which similar treatment proved entirely successful. Again, a class of cases that is usually very difficult to treat—viz., that of gonorrheal orchitis—seems to have proved fairly tractable when managed with the help of chloroform. Here one of the first signs of improvement was frequently the re-establishment of an old discharge, which was soon cured simultaneously with the epididymitis.—*Lancet.*

Chilblains.—An interesting correspondence has recently taken place in the *Brit. Med. Jour.* regarding the treatment of chilblains. One correspondent says that the socks of stockings should be of wool and not too thick. They should be thoroughly dry when put on, and changed as soon as they become damp, either from perspiration or moisture leaking through the shoes. For this reason the socks should be changed immediately after taking exercise, and the same shoes or boots should not be put on again unless they are quite dry. The same pair of socks should not be worn for two consecutive days, but each pair should be washed, or at least thoroughly dried, before being worn a second time. On no account are the socks to be allowed to dry on the feet, and the practice of putting the feet before the fire is to be condemned. Chilblains are most prevalent when the weather is both cold and damp. It is important to insist upon regular exercise and a moderate diet, and to sedulously prevent constipation. For the immediate relief of itching nothing is better than soaking in hot water. Iodine is the best external application. It should be applied—either as an ointment or tincture of twice the ordinary strength—once or twice daily, as long as the skin remains swollen or red.

Dr. Robert McBride thinks the following is the most efficacious:

℞ Lin. belladonnæ (br. ph.), - ʒ2
Lin. aconiti (br. ph.), - - ʒ1
Acid. carbol., - - - ♏6
Collodii flex., - - ad ℥1

M. To be applied with a camel's hair pencil every night to the parts affected.

Dr. G. E. J. Greene has found the following application a useful one, even when the chilblains are broken:

℞ Olei ricini,
Olei terebinth,
Collodii flex, - - aa ʒ4

M. To be used twice or thrice daily.

Dr. B. Nichols speaks very highly of the following:

℞ Spir. camphor, - - - ʒ2
Tr. opii, - - - ʒ2
Acid carbol., - - gr. 40
Alcohol, - - - ʒ4
Aquæ, - - - - ʒ4

If the skin is broken, this lotion may be diluted with water and applied on lint or with a soft rag.

Another writer states that, if the chilblains are painted with equal parts of compound tincture of iodine and collodion, three or four times, considerable benefit will follow. He has never known this treatment to fail since he first tried it some ten years since.—*Can. Med. Rec.*

Massage of Abdomen and Lumbar Region as a Diuretic.—Dr. Polubinski reports his observations of massage on the abdomen and lumbar region made with a view of ascertaining its physiological action on the kidneys. The subjects upon whom he experimented were healthy persons, and they received the same quantity of food. The experiment commenced at 12 (noon) when the subjects (ten in number) urinated, and the urine thrown away. The urine of the twenty-four hours was collected in different vessels as follows: First portion from 12 to 2 P.M. (in massage days: dinner, half hour; massage, half hour, and one hour rest); second portion, from 2 to 4 P.M. (massage, half hour; one and a half hour rest), and from 4 to 12 of the following day. When the abdomen was massaged the quantity of urine during the first two hours was considerably increased, so much so that the whole quantity of the twenty-four hours, as compared with that on non-massage days was notably increased. The amount of urine between 12 and 4 P.M. was three times that on non-massage days for the same period. Even the third portion of the urine (from 4 P.M. till noon) was on the increase, insignificantly, though. Along with the increase in quantity the solids urea and urates were increased. When massage of lumbar region was made the quantity remained the same on non-massage days, but the solids urea and urates, considerably increased during the whole twenty-four hours.—*Vratsch.*

Bilious Attacks.—The bilious attacks occurring in neurotic individuals are very different paroxysms from those seen in habitual or occasional overfeeders. A clean tongue—often "geographical" or desquamating too freely in patches—a scanty, high-colored lithatic urine, a sallow face, white motions, dilated pupils, low spirits, and absence of energy, constitute the clinical entity in many cases of bilious attacks. These are very common in neurotic children with dainty appetites, in whom to suppose that irritation and vascular engorgement of the viscera, from overfeeding, exist, would be ridiculous. A sharp purge to these patients may do more harm than good, though it is possible to set the viscera working again by such sudden means. An inadequate liver may be the cause of a toxemia, and the poison in the blood may have a selective action on the mental centers, originating lowness of spirits, melancholia; this is the view most favored by the laity, but it is often incorrect. In truth, a mutual tension between the viscera and the brain exists—reciprocity rules the realms of the human body as it does the social organism. The truth appears to be that the viscera may go wrong as the result of being undercharged with nervous energy, and they simply cease to work effectively because of defective nervous energization. The correct treatment is not a dose of castor oil, but a tablespoonful of wine at once and a tablespoonful of syrup of the hypophosphites three times every day for one week.—Angel Money, in *Lancet.*

Asylum Changes in Chicago.—The outcome of the prolonged investigation into the asylum troubles at Chicago has been made public by the action of the County Board of Cook County. This action removes Dr. James G. Kiernan from the position of medical superintendent and appoints Dr. W. L. Noble as acting superintendent. It was in consequence of these troubles and investigations that one of the judges who have participated in them recorded his memorable expression about the malign influence of politics over asylum government, when he urged that the institution must be removed to some other site, "so that the sweet waters of charity shall not be polluted by politics."

Effect of Sleep on the Gastric Juice.—Some in-investigations which have recently been carried out in Professor Manassein's wards in St. Petersburg, by Dr. S. L. Rappoport, on the effects of sleep on the secretion of the gastric juice are published in the last few numbers of the *Vrach*, and tend to show that the digestive functions of the gastric juice are materially affected by sleep. The experiments were made on the human subject, the gastric juice being withdrawn by means of a flexible india rubber osophagus sound, the introduction of which is said not to have caused any inconvenience to the subjects of the research. The quantity of the gastric juice secreted during sleep was shown to be very much less than that secreted during waking hours; the chloride of sodium, as well as the hydrochloric acid, were diminished; but the secretion of pepsin did not seem to be mueh affected. By means of experiments conducteu in the laboratory, it was found that the digestive power of gastric juice secreted during sleep was lower than that secreted during waking hours, the difference apparently depending mainly upon the lack of hydrochloric acid. With regrad to the rennet ferment, Dr. Rappoport was unable to demonstrate any alteration in its secretion during sleep—*London Lancet.*

Vertigo From Constipation. — Persons who are accustomed to have a regular action of the bowels every morning are usually affected with giddiness or vertigo, or with a sense of faintness, if the natural habit be, by any accident omitted. The reason is a very simple one, and is purely mechanical. The regular habit causes the rectum to be loaded with feces, and when the rectum is loaded their is pressure on the surrounding veins. But, as I have shown by direct experiment, the cerebro-spinal fluid finds its way into the venous circulation by the inferior vena cava and the common iliac veins.

When, therefore, there is pressure, causing impediment to the venous circulation in the pelvis, there is at since an interference with the process of escape of the cerebro-spinal fluid, and pressure upon the whole of the cord, up to the cerebum itself.

The form of constipation here referred to is in the rectum, and must not be confounded with constipation due to accumulation or inaction in the colon. Vertigo with constipation. and with the patient connecting the uneasy cerebral spmptoms with the contipation, is an indication that that rectum is loaded, and that relief will follow from a brisk aleotic purge.—B. W. Richardson, M. D., in *Col. and Clin. Record.*

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service.

ENDING AUGUST 3, 1888.

Hutton, W. H. H., Surgeon, when relieved at Mobile, Ala., to assume command of the service at Baltimore, Md., July 23, 1889.

Purviance, George, Surgeon, when relieved at Baltimore, Md., to assume command of the service at Philadelphia, Pa., July 24, 1889.

Gassaway, J. M., Surgeon, ordered to New Orleans, La., for temporary duty, Aug. 2, 1889.

Goldsborough, C. B., Surgeon, granted leave of abseuce for thirty days, July 29, 1889.

Vaughan, G. T., Assistant Surgeon, orders to Norfolk, Va., revoked; to proceed to Cairo, Ill., for temporary duty, Aug. 1, 1889.

Groenevelt, J. F., Assistant Surgeon, relieved from duty at Gulf Quarantine Station; ordered to Mobile, Ala., for temporary duty, Aug. 3, 1889.

ORIGINAL ARTICLES.

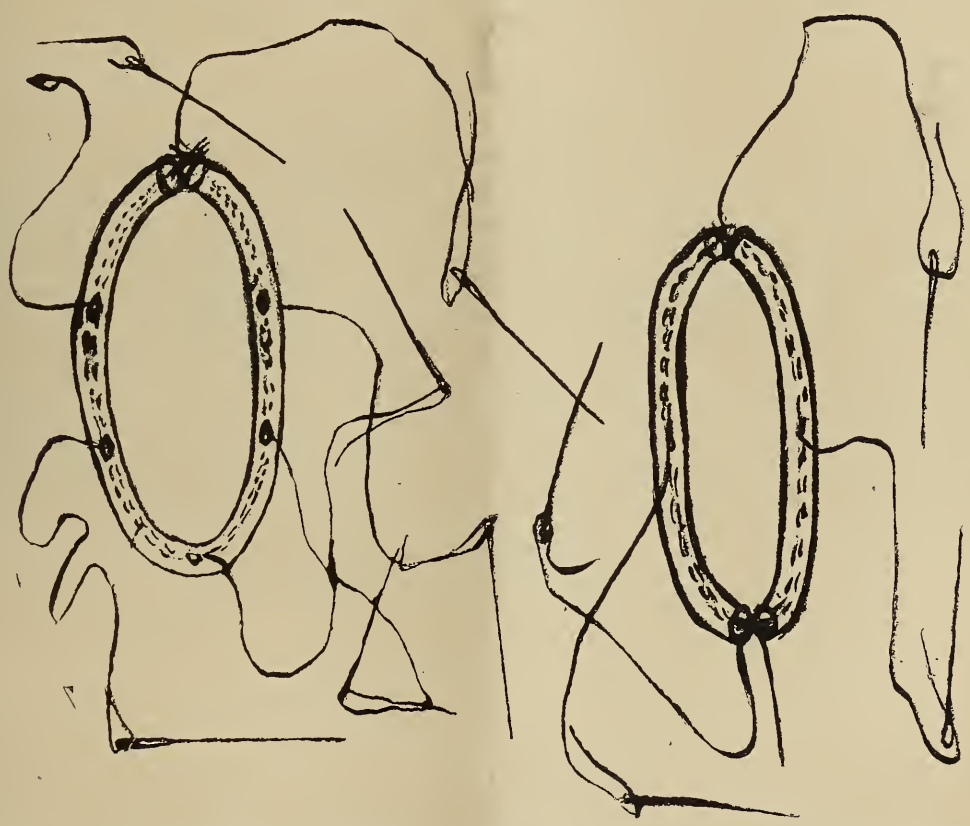
AN EXPERIMENTAL STUDY OF INTESTINAL ANASTOMOSIS—WITH SOME PRACTICAL SUGGESTIONS AS TO A MODIFIED TECHNIQUE.

BY A. V. L. BROKAW, M.D.,

Demonstrator of Anatomy in Missouri Medical College; Assistant to the Chair of Surgery and Senior Assistant Surgeon, St. John's Hospital, St. Louis, Mo.

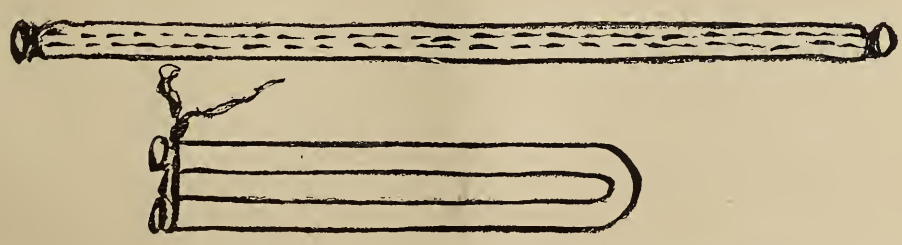
Until Nicholas Senn gave us the results of his labors in the field of intestinal surgery, the prospect for great success in such operations was rather unpromising; but all agree now, I think, that he has reduced some of the most difficult problems in intestinal work to a basis of absolute simplicity. Operations which heretofore consumed one, two or more hours, even in the hands of surgeons noted for their rapidity and skill, can now, by a knowledge of the technique of Senn, or the more recent modification suggested by Abbe of New York, be completed in a very few minutes.

The intestinal anastomoses formed by the use of decalcified bone-plates as used by Senn, and the catgut rings of Robt. Abbe are both very excellent methods. After experimenting with the methods mentioned, I believe I have devised a far more simple technique, and offer as a substitute, rings of unperforated rubber tub-



Intestinal ring made of a piece of rubber tubing. Strands of catgut (.....) within the Tube to which tie the approximation thread.(———)

Intestinal rubber ring made of two pieces of tubing.

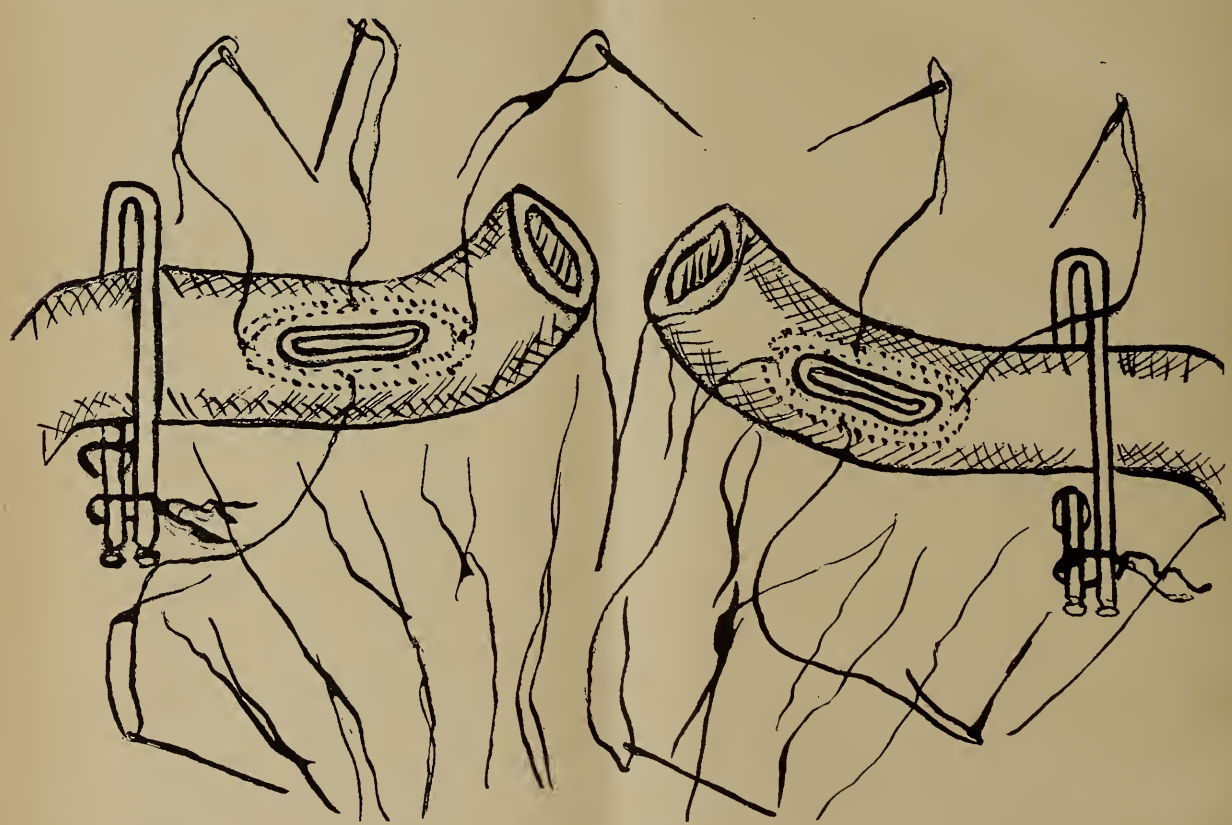


Clamps of No. 12 copper wire covered with rubber tubing.

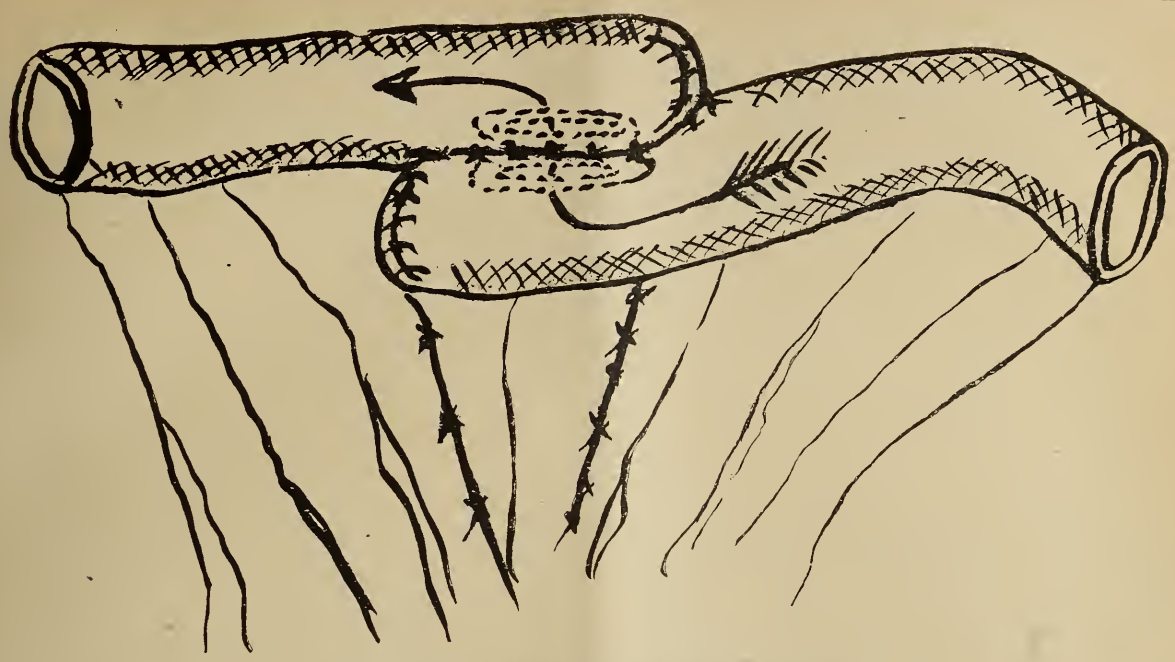
ing, which, if prepared in the following manner, will greatly simplify the process of forming intestinal anastomosis:

Unperforated drainage tubing of a diameter less than one-fourth inch is selected. For most work the white-ribbed tubing of one-seventh or one-fifth inch in diameter is preferable. Of this a section is taken some three inches long, or even longer, according to the size of the opening desired. Through the lumen of this section of tubing are passed several strands of dried juniper catgut; these strands are left to protrude for some distance from the extremities of the tubing to faciliate the process of tying. We now have an elastic ring which is oval and maintains its shape until the catgut strands within the tubing give way. It then straightens out and passes from the bowel. Four to six small slits or openings are made equidistant in the sides of the ring and through these are passed fine silk; these ligatures are then caught and fastened to the strands of catgut within the ring, as described above. This avoids the formation of knots and irregularities and aids the ready throwing off of the rings when the catgut is absorbed. It now only remains necessary to thread the needles. If catgut apposition-threads are used—and I find that with these, the ring comes away some days earlier than when silk threads are used—it is only necessary to attach the apposition strands direct to the rubber tubing, thus avoiding the trouble of attaching the threads, if silk be used, to the gut-strands within the ring. To avoid tangling of the threads and unnecesary waste of time, I have found it convenient to place the ring thus finished upon an anteseptic towel or flat sponge, keeping the needles apart.

With two such rings I find the operation of intestinal anastomosis extremely easy. The advantages claimed for rings so prepared are, that on compressing laterally the ring, its introduction through the intestinal opening, even though the latter be quite small, is very easy, and the ring immediately resumes its oval shape within the intestine. There is no tendency to a lateral falling together of the wound-margins or lessening of the aperture, which might occur by the softening of catgut rings. From numerous experiments on dogs, I find that the resulting aperture is all that could be desired. The rubber ring is thrown off *per viam naturalem* as soon as the catgut strands within the tube are softened and absorbed by the action of the intestinal fluids upon them.



The simplicity in the preparation of these rings is a strong plea in their favor, for, in case of emergency, they can be made in a few moments during the operation. Senn's plates are difficult to prepare and the opening is sometimes rather small. The catgut rings of Abbe are most excellent, but I find that to give them a fair preparation requires too much trouble and time. The rubber rings cannot kink or curl up, but on absorption of the catgut strands within the rings, they become straight and offer no obstruction in their passage. Bone-plates, when not soon absorbed, may block up the intestinal opening by becoming impacted, and an unequal absorption of catgut rings might form an obstruc-

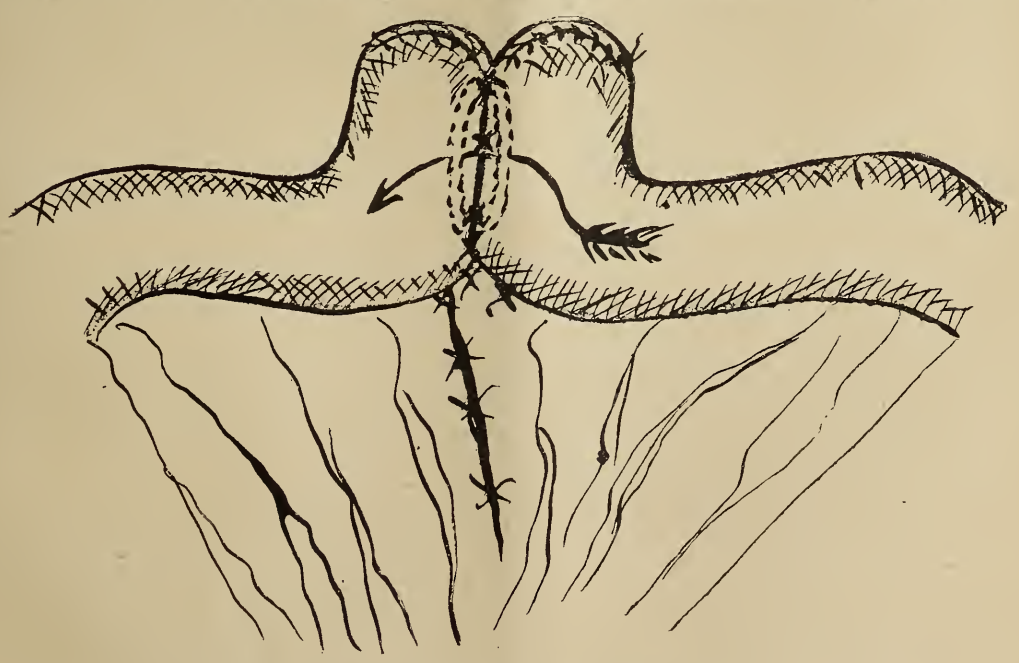


Illustrating an anastomosis after enterectomy.

tive meshwork at the point of anastomosis.

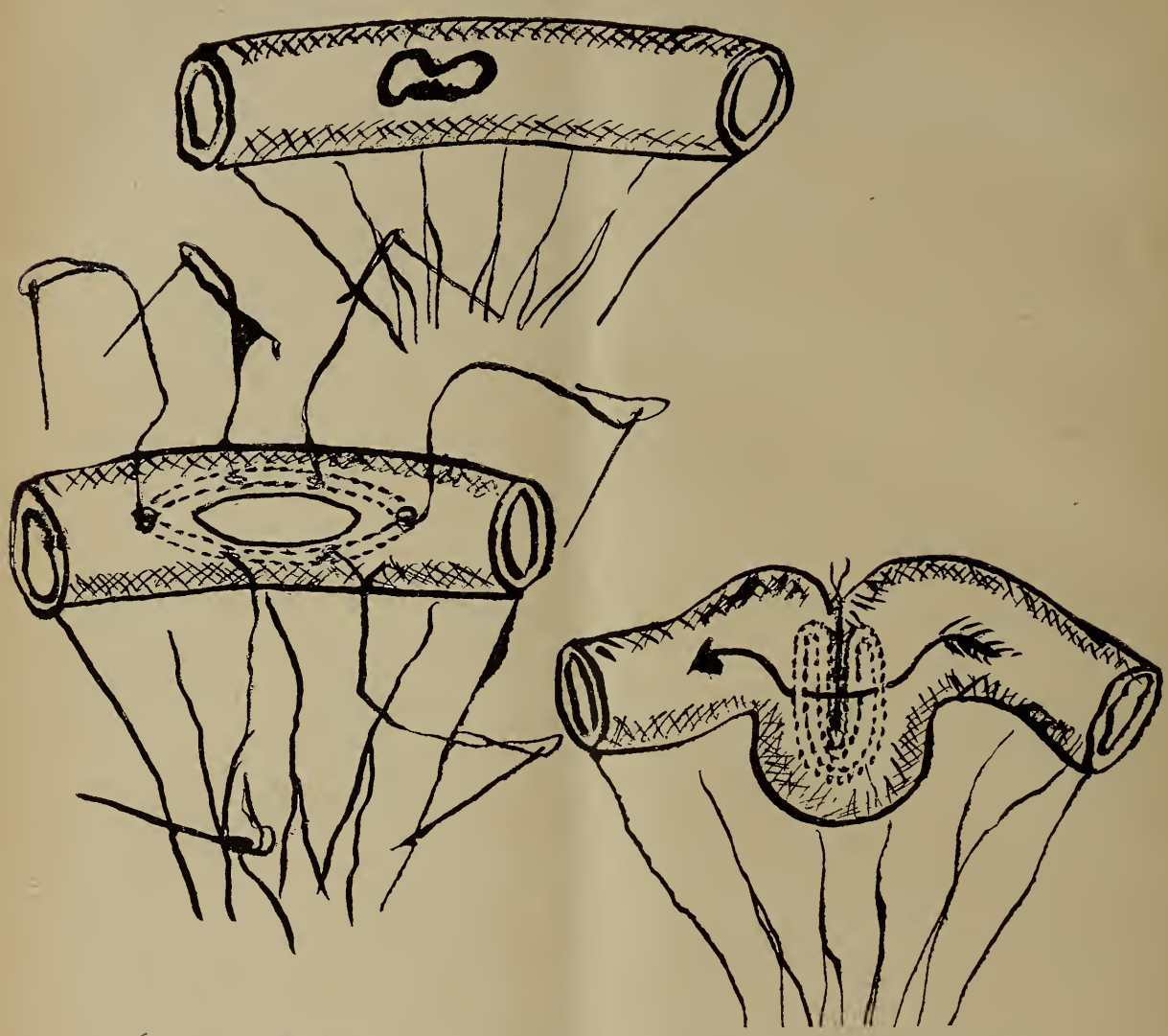
Before opening the gut, it is necessary in most all cases to apply clamps, or a temporary elastic ligature distally and proximally to prevent fecal extravasation. Very small drainage tubing, one-eight or one-fourth inch in diameter, is frequently used for the purpose by passing it through the mesentery and tying it around the intestine. This answers very well, but an inexpensive clamp, which may be used with advantage, may be prepared in this manner: Six or seven inches of No. 12 copper wire are covered with unperforated rubber drainage tubing of small size. The extremities of tubing over lapping the ends of the wire are ligated and the rubber-covered wire is bent upon itself. The clamp is applied by slipping it over the free margin of the intestine, at the same time pushing the lower blade through the mesentery, fairly close to its junction with the intestine. The blades are made perfectly parallel and an elastic band or ligature is thrown around the ends. This little appliance is very simple and has several advantages; it holds the intestinal walls evenly together, aiding the assistant in holding securely the intestines while the rubber rings are being introduced and tied in position.

The manner of applying the rings in forming an intestinal anastomosis is exceedingly simple. Compress



Illustrating an anastomosis after an enterectomy.

Gunshot wound.



Ring in the intestine before tying. Ring bent double and sutured in position.

the ring, pass it into the lumen of the bowel or stomach, as the case may be, pass the threads at the end of the oval first and then the lateral threads. Now make slight traction to ascertain whether the ring rests well in place; pass the second ring in the same manner, appose and tie.

Scarification of the marginal serous surface as suggested by Senn is of undoubted value, since it increases plastic exudation and creates greater promise of union. A few Lembert sutures at several points add to the safety; this can be done after tying the apposition threads.

After many experiments, I think I have devised a method of treatment, which may in some cases of gunshot injury of the intestines be of value. If the wounds be not too close together, especially where a stenosis might follow suturing, the method to be explained seems to answer the purpose admirably, as proven by experimental studies. If the wounds are wide apart each one should be dealt with separately. The margins of the wound should first be carefully trimmed with scissors; the oval ring, selected for the purpose, should be of good length, the aperture about two and one half inches. Six threads of apposition should be used with this ring, so arranged that when tied they will hold the oval ring bent evenly on itself. One thread at each end of the ring and two on each side are desirable. The ring is now introduced into the bowel and doubled upon itself, then the threads are tied, beginning with the end strings and afterwards with the lateral. The addition of a few Lembert sutures adds to the security.

The apparent flexion of gut thus produced will be found to have as great, if not greater, lumen at the point of flexure than the neighboring parts of the intestine. Other isolated wounds may be treated in the same manner. If two wounds are in the same loop of intestine, I would suggest the use of two ordinary sized rings, the trimming of the wound edges and the form-

ation of anastomosis. When more than two wounds are found close together, an anastomosis by lateral apposition, after excising the damaged portion of the bowel, would be far better than attempting the classical circular enterorrhaphy.

These principles of operative procedure may be applied to a great number of similar cases, e. g., to perforated typhoid ulcerations of the bowels, etc.

To sum up the whole, the substitute offered seems to be in every respect an improvement. The great trinity of attributes in surgery—especially abdominal surgery—is simplicity, safety, rapidity, and the technique proposed in this paper, I believe, embraces them all.

NOTE I.—Rings made from two equal sections of tubing pass from four to six days earlier than those made of a single section; *vide* illustrations of rings.

NOTE II.—In my experimental operations on 12 dogs, but one dog died, and this death was not the direct result of the operation, for the dog did well until the 6th day, when he tore out the abdominal sutures; as a result, the intestines were extruded and became covered with dirt. This was not noticed for probably several hours; when it was discovered, I replaced the viscera into the abdominal cavity after washing them thoroughly; the dog died four hours later of peritonitus and shock.

NOTE III.—In the operation described above for treatment of gunshot wounds with a single ring, there may be some tendency to eversion of the margin of the bowel at the point of flexure; to prevent this I find that a single cat-gut suture passed through the margins of the wound at the point of flexion is all that is necessary. The suture need not be drawn tight enough to bring the wound-margins together; I usually leave them about a quarter of an inch apart. This step should always follow the introduction of the ring.

NOTE IV.—In my third series of experiments upon seven dogs, the rings used were made of from four to six equal sections of tubing in the manner described. This modification of the original ring, made of single or double sections of tubing, is probably of decided value, as the small segments come away earlier. In a gastro enterostomy made Aug. 3, some of the segments of the rings used were found on the ninth of August. The closure of a large opening in the free surface of the bowel (size of a half-dollar) may be made in five minutes, and with practice in less time.

RADICAL CURE OF FISTULA IN ANO AND HEMORRHOIDS BY ELECTRICITY.

BY W. S. SHOTWELL, GRAND RAPIDS, MICH.

I would call the attention of the profession to more rapid methods of curing fistula in ano and hemorrhoids, coupled with safety and their radical extermination.

Having devoted years to this branch of the healing art, many times with tedious and unsatisfactory results, employing the much talked of Brinkerhoff and other methods, I now challenge the world to compare the results with the methods I now use in the cure of fistula in ano, be there one or a dozen openings.

I employ an electrolytic battery of 12 ampere power with sufficient of the cautery element to subdue any hemorrhage that may perchance occur. My portable battery that I take to the patient's house is about 6 by 10 inches long and 10 inches high with 2 cells, and built chiefly for quantity, charging it with the oxide of chromium and sulphuric acid. The method of procedure is this: the battery is first charged and the patient's bowels thoroughly emptied by means of an astringent injection; I then place the patient on his side and with the Shotwell rectoscope, or other suitable speculum, the inner opening is located, or if it be an external incomplete fistula the side opening of the rectoscope is so turned that the possible opening is in view. The patient is, of course under the, influence of an anesthetic. I then straighten out the fistulous track next nearest the anus with a stiff steel probe, of sufficient length, having an eye near its introductory end, and if the anus does not open into the bowel, perforate the intervening tissue till the eye of the probe is distinctly seen in the rectoscope. Leaving it there, I next introduce a lance-pointed probe, having also an eye near its end, about three-eighths of an inch farther from the anus, into the solid structure and parallel with the fistulous track till its eye is also seen penetrating the bowel in the opening of the rectoscope. The eyes of both probes are threaded with the opposite ends of a No. 24 platinum wire about 10 inches in length, and both probes are then withdrawn, leaving the wire in situ forming a loop. Both ends are now secured to an electrode, the electric current turned on and the loop drawn through the partition, in its passage destroying the membrane which lines the fistulous track. No dressing is necessary, as it is well known that no wounds heal more kindly than those made by a battery; the bowels, however, must be kept locked up for a week longer, when the patient gets up a well man, complete union taking place by first intention.

The above method I have employed in many instances with complete success. In hemorrhoids and prolapsus ani, I employ a similar treatment, no matter how large the protrusion or how long the patient has suffered, first bringing the growths all outside the anus, and in one treatment of a few moments the work is done, and is always successful, followed by no hemorrhage or unpleasant symptoms or pain.

Should your many readers desire further information I shall be only too glad to give the same gratis to all who may apply, by addressing me at Grand Rapids, Mich.

A WASH of equal parts of lactic acid and glycerine is said to remove freckles, and to be harmless to the skin.

REPORT ON PROGRESS.

DISEASES OF THE NERVOUS SYSTEM.

BY FRANK R. FRY, M. D., ST. LOUIS.

I. The Treatment of Sciatica.

II. Pilocarpine in Convulsive Attacks of Hystero-Epilepsy, and in Maniacal Excitement.

III. Increasing Frequency of General Paralysis of the Insane.

The Treatment of Sciatica.

At a recent meeting of the Philadelphia Neurological Society there was a rather extensive discussion on the treatment of sciatica. It was very interesting, if for no other reason, because of the prominent physicians who took part in it. We think, however, that it may fairly be said to cover the ground of any advancement that has been made within the last few years toward the more successful treatment of this intractable malady.

Dr. S. Solis-Cohen read the notes of a case of obstinate sciatica cured by deep injection of osmic acid. The method of treating sciatica by deep injections of a solution of osmic acid is so well known that the present case is reported only on account of its peculiar therapeutic history previous to the resort to the agent in question. Nearly every other medicinal and surgical means known had been tried faithfully, but without good result. The details of the case are given merely to show that osmic acid was really the curative agent.

George D., brakeman, æt. 45 years, was admitted to the Department of Clinical Medicine of the Philadelphia Polyclinic, March 24, 1888. For twenty years the patient had had more or less pain in the lumbar region, of gradual development, attributed by him to the fall of a log upon his back while engaged in transport duty during the war. About thirteen months ago he began to feel pain in the right hip extending along the course of the sciatic nerve to the heel. The pain was constant with paroxysms of aggravation, very frequently preventing him from working or even standing erect. Sleep was continually disturbed. He had been under treatment first in the Department for Nervous Diseases, where the diagnosis of sciatica was made, and then in the Surgical Department, for about a year; having been subjected to the influence of a number of medicaments, including among many others, arsenic, potassium iodide, antipyrine, and antifebrin; injections of atropine, morphine and theine; electrical treatment had been employed; and among surgical procedures, nerve-stretching by elevating the limb during ether anesthesia, and, finally, nerve-stretching after incision and exposure. The latter operation was performed February 21, 1888. Immediately after the operation slight relief was experienced, although pain below the knee continued, and with the return of power of motion in the limb, pain recurred as violent as ever; and had continued without intermission for about two weeks, except when the patient was under the influence of hypodermatic injections of morphine, without which he could not obtain sleep. He was then transferred to the general medical clinic. Salol being then under investigation, especially as to its anangesic properties, was prescribed tentatively in doses of about thirty to forty grains per diem. It gave relief, but not enough to warrant the hope of permanent good from its continued administration.

March 29. An injection of ten minims of a 1% solution of osmic acid was made deeply into the thigh in the neighborhood of the point of emergence of the sciatic nerve, just above the cicatrix of the incision for nerve-stretching. On each of the two succeeding days, fifteen minims were injected. Improvement now began to be manifested, although the pain continued to disturb sleep. Tri-weekly injections of twenty minims each were made during the next two weeks; a pill of morphine, belladonna and quinine being given when necessary to produce sleep.

April 11. The patient was improved sufficiently to sleep without the pill.

May 17. The patient returned, stating that he still had pain, coming on at twelve or one o'clock at night and lasting until morning. He was free from pain during the day, and could walk readily with the aid of a cane. An injection of thirty minims was made at the same point as previous injection.

January 1, 1889. The patient being sent for reports that after the last injection he was so sore that he could not sleep that night. The soreness gradually abated, and two weeks later he was able to sleep without interruption during the whole night. Since then he has had no pain of any account. There is some weakness of the leg below the knee, and some improvement in the movement of the foot, but not enough to interfere with locomotion with the aid of a cane. He considers himself well.

Dr. J. Madison Taylor said that probably the best treatment for sciatica is absolute rest. This coupled with the use of continued cold, with galvanism, the repeated use of the actual cautery, or blisters, usually does much good. But oftentimes more is needed in the shape of regulated exercise, passive exercise of the affected limb; in short, overstretching of the nerve by forced extension and flexion by a skilled manipulator, deep massage and the like. These last seem often to do as much or more than the more radical measures, but require the services of an experienced assistant, which many cannot afford.

A year or two ago a patient, suffering from an obstinate form of syphilis, which resisted treatment at the best hands in this country, went abroad and got practically well in the hands of a clever physician in Germany, by the use of our ancient ally, mercurial ointment, applied in a very novel and effective manner. This consisted of a glass rod, the size of a section of broom handle, two feet long, on which the ointment

was smeared, and thence slowly and firmly rubbed into the skin. This combined the inunctions which could thus be made very thorough and systematic, with deep massage of the tissues. It certainly seemed to effect a more thorough introduction of the drug into the circulation, for the ointment was thus made to entirely disappear into the skin. The firm slow pressure thus exerted must have an immensely stimulating effect on the muscles, nerve sheaths, etc., as well as on the absorbents, and is of itself an excellent tonic. This method he has not yet been able to test thoroughly in cases of syphilis, but he confidently recommends it as offering great possibilities of rapidly impressing the system with mercury.

Having a patient suffering from chronic sciatic neuritis, on whom the skill of several specialists had been wrought in vain, he determined to apply the same method of treatment. He used an ointment of mercury, belladonna and iodine, applied on a glass rod, for fifteen minutes at a time. Very prompt relief from pain was felt. Later he resorted to the use of the rod without the ointment, and with apparently equally good results. In a short time, two or three weeks, his case was practically cured. Since then he has used this method in many cases, usually in the hands of the patient himself—a most convenient plan. Its use is followed by a marked sensation of warmth and comfort. In one case, that of a gentleman who was obliged frequently to ride on horseback to his business out of town, the pain in both legs became intense at three or four o'clock in the morning, keeping him awake thereafter. Nothing so resisted this as ten minutes deep massage with the rod. In a month pain which had resisted remedies for a year had gone.

Dr. Charles K. Mills did not think he had exhausted all the remedies known to our art in the treatment of the case reported by Dr. Cohen; but he remembered that the patient was treated by various methods, medicinal and otherwise. This was one of several cases in which he employed hypodermic injections of theine. He believed that this patient received a large number of these injections. His success with this measure had been varying. In a few cases the patients had been benefited, but in the case reported to-night, and in others, the relief has been only temporary. The treatment of sciatica, like the treatment of chorea or rheumatism, is a subject about which we might talk for a long time simply enumerating the remedies that have been used. In his own practice he had a method of treating sciatica which, while it might not be scientific, was practical. He divided his cases into recent cases, old cases and intermediate cases. Recent cases would commonly yield to such remedies as salicylate of sodium, oil of gaultheria, and analogous drugs, associating with this treatment the hypodermic injection of morphia and atropia, and sometimes of theine. For the old cases he used some very old remedies, and often with greater success than some of the newer remedies. He had used turpentine with success after the method first recommended by Thomas King Chambers. He also used Donavan's solution in fair doses; also iodide of potassium and colchicum. In these cases he nearly always associated with the foregoing agents the use of cod-liver oil, massage and electricity. On the whole he got as good results from this treatment as from any other. He had also used the Adamkiewicz electrode, by means of which chloroform is applied externally and electrically. The treatment had proved successful in a few instances. All, of course, had used counter-irritation. The use of the hot iron certainly acted better than any other form of counter-irritation. So far as osmic acid is concerned, he had had very little experience. He had used nerve-stretching by the method without cutting, and in a few cases by cutting, but never with any marked success.

The case reported to-night is valuable and interesting, but the report of a single brilliant success with a remedy like osmic acid in a case like this, does not carry the full force of conviction as to its great value. The disease had existed for a very long time, it is true, and it finally yielded apparently to this agent, not long after surgical and other procedures had been used.

Dr. James Hendrie Lloyd last year treated a case of sciatica which he cured in eight months, and he wished to refer especially to what seemed to do the most good. He first applied the hot iron very thoroughly; he burned four holes along the course of the sciatic nerve. This afforded some relief, but did not cure the case. The man was sick for at least six months after this application. During this time he employed the usual remedies, salicylate of sodium in large doses, antipyrine, etc. He packed the leg in flowers of sulphur for a time without benefit. He then had an exacerbation of the pain and had to employ large doses of morphia hypodermically. The injections were made deep into the muscles, but he must have used a syringe which was not asceptic, for abscesses formed. These were quite troublesome and burrowed through the muscles of the buttock, but the effect on the sciatica was very marked. Improvement began as soon as there was a free escape of pus. He supposed that this acted simply as another form of counter-irritant. He, however, did not recommend this as a method of treatment.

Speaking of one case not establishing a principle reminded him that in the first year of his practice he saw an obstinate case of sciatica in the person of his preceptor. After it had continued six months, the application of the hot iron in exactly the same manner as he employed it in the case referred to, was attended with brilliant success. From the time that he came out of the ether he never had a recurrence of the pain, and for the remaining two or three years of his life he had no return of the trouble.

Last year he saw removed, at the Philadelphia Hospital, a sciatic nerve, which evidently had been the seat of a good deal of inflammation. He could not help thinking that the proper way to treat such a case would be to cut down with antiseptic precautions and open the sheath of the nerve. He believed that if we could be

positive that the nerve is in that condition, that would be the method which would give the best results. This would be only following the old-fashioned practise, obtained from the Chinese, of puncturing the sheath of the nerve with gold needles. He did not believe that the rubbing of ointments on the skin, separated from the nerve by thick layers of muscles, could influence the inflammatory action. He was sceptical in regard to all such remedies.

Dr. F. X. Dercum said that there was one practical point of importance in regard to the use of the actual cautery, that is, that the burn should be superficial, not deep. We want to impress the nerve-endings, not to make holes, and to heal up the burns as rapidly as possible. After applying the hot iron, dress the burn antiseptically and allow it to heal. It is, he thinks, the repeated burnings that accomplish the good. His ordinary method in the treatment of sciatica is to first use the salicylates. If ordinary doses do not give a good result, then to give as large a dose as the patient can bear. The suggestion of Dr. Lloyd in regard to opening the sheath, he considered a valuable one. If there is inflammation, incision of the sheath would allow the effusion to escape. Even if it did not accomplish good in this way, it might so alter the nutrition of the nerve that benefit would ensue.

Dr. S. Weir-Mitchell desired to make a few remarks upon this disease, which is so often quite easy to treat, and again so excessively difficult. It has a host of remedies. It had been his own fortune to see in hospital practise an enormous number of cases of sciatica, and he really thought he had done something toward improving the methods of treatment in old and obstinate cases. It is probable that a large number of slighter cases are of rheumatic origin, but when this condition endures for a long time, or there is a primary traumatic cause, it is pretty sure to end in inflammation of the sheath, or of the nerve track, or of both, with more or less effusion within the sheath. Much of this opinion may seem to be mere guess-work, for the opportunities of seeing the living nerve are rare. He had, however, in two cases during the war, seen the nerve cut down upon for the relief of serious traumatic neuralgia. In both there was a considerable amount of serum within the nerve sheath. In one, as he remembered, the nerve itself was distinctly swollen and inflamed. In both these instances four or more inches of the nerve was exposed, and in both cases the results of the operation were excellent.

In speaking of the treatment of sciatica, he desired to say that if the case has lasted long, or has not, and is serious or slight, of course he need hardly refer to the need of the most careful attention to the constitutional condition of the patient; nor need he go into the consideration of the anemic, scorbutic, or gouty states, which require and reward prompt treatment by internal remedies. He might say, however, that if these matters having been duly considered, in ordinary instances of sciatica, massage alone is often competent to do the rest. What Dr. Taylor had said in this connection is of interest. This mode of treatment by massage is what the French call *effleurage*, and not deep kneading. A roller of glass would be a good instrument for making this form of impression on the nerves. It is simple, and anybody could be taught to use it.

In more severe cases the cautery is his favorite remedy. He was perfectly at one with Dr. Dercum in reference to the manner of using it. It should be used so as not to destroy the skin, which ought to be touched lightly three or four times in places along the track of the nerve. This may be repeated every three or four days until a cure is effected. Such burns scarcely require any dressing. In children, or in nervous people, the previous application of ice, or of ice and salt, will prevent any immediate pain. But as regards this and all local means of treating this disorder he felt quite sure that they are most successful when the patient is kept at rest in bed.

As to nerve stretching, he had had it done for sciatica three times, and he had seen three cases in which it had been done, so that his whole experience rest upon six cases. He thought he had never seen a case cured by this means. He did not say that it did not relieve for a time, for it did. But he might also add that in the last few years he had seen cases of this disease treated by nerve-stretching with failure of relief, and had afterwards seen them cured by means which might have been used first. Strong extension of the muscles, such as involves more or less stretching of the nerves, he thought was of great value in certain spastic spinal affections. But he had never had any luck with this treatment of sciatica.

He would like again and again to repeat that in severe cases rest is an imperative need. By this he did not mean merely remaining in bed, but the use of methods which may or may not be altogether his own (that is a matter of indifference), but which he had never seen elsewhere described, and which are now often used in the infirmary by himself and his colleagues. These consist in placing the patient who has this neuralgia in bed and putting on him an old fashioned thigh-fracture splint, insisting on its being worn night and day, so that it is impossible for him to bend his leg. The result of this absolute rest is, in many cases quite remarkable. Nor does this means forbid the use of other agencies, notably the cautery, or low temperature, or of other measures which may be allowable.

Another measure which he did not know to have been used by any other one than himself is the persistent application of ice along the nerve track. This consists in applying ice-bags along the whole track of the main nerve in connection with the splint; that is too say, these bags are applied from the sciatic notch to below the knee. Tney are kept on day and night. In one case they were used as long as three weeks, with triumphant results.

He had made some investigations in regard to the temperature obtained by these applications, and at a

later date he would make a report on this, considering it to be a subject worthy of further investigation. He had used bags filled with ice, and had had ice water circulating through the bag. He had found that, by the use of different saline solutions with ice, it was possible to secure certain definite temperatures in the skin under tbe bags.

Dr. Wharton Sinkler desired to call attention to one method which had not been spoken of. That is the method of acupuncture by the German apparatus called Baumscheidtmus, consisting of a number of needles which are driven into the skin in the course of the nerve and some counter-irritant oil rubbed in. He had cured one case of most obstinate and violent sciatica by this means, aud the patient remained well for a number of years. In this case, however, it is possible that the result was influenced by the sloughing which occurred at the point of puncture. In another case, in which sloughing did not occur, a cure was also effected.

Dr. Solis-Cohen was aware that one case does not establish a general rule, and on that account simply reported this case without comment. Osmic acid, however, is not and untried remedy. There are many cases of its use on record, principally during the last five or six years. He had used it in some twelve or fifteen cases, but only two were in private practice, and the notes in regard to the others are not at present acces sible. His impression is that the result was satisfactory in about one-half of the cases. The German physician who first investigated this method reported upward of forty or fifty cases, and found that the results were best in the oldest cases. It was useless in the acute cases. Some experiments on animals were reported, showing that a definite alteration in the nerve cells, similar to that observed in histological preparations treated with the same agent, followed the injection of the remedy. It is probable that conduction is interfered with. He did not know how else we can explain the good result. He agreed with the speakers who consider internal remedies, except where there is a constitutional or diathetic fault, as useless, except for pallia tion. Where the sciatica depends upon gout, or rheumatism, or anemia, of course, salicylates, iron, arsenic, etc., as indicated, will often effect a cure, or greatly assist recovery. The value of iron specially needs emphasis, not only in anemic but certain rheumatic conditions. Among remedies not mentioned, he had seen good results from the deep injection of chloroform. He had also occasionally seen temporary good results from the deep injection of atropine and morphine, in cases where the injection of morphine alone was without curative effect. The long list of agents and methods, each of which has been useful in some instances, shows there is no single treatment; but he believes that osmic acid, deeply injected near the seat of greatest pain, is among the remedies eminently worthy of consideration in unyeilding cases such as that reported.

Dr. J. Madison Taylor said that there is an anatomical point which he did not see credited with the influence which it deserves in determining the frequent occurrence of neuritis of the great sciatic near its exit from the notch. The nerve is very exposed just here, and it suffers direct compression by the action of several powerful muscles which run directly transverse to its course. The pyriformis alone acts as almost a constricting band in front, opposed by the obturator interni and Gemelli beneath. In whatsoever attidude the body assumes when any of these muscles are put in tension, there is strong compression exerted on these tender fibres. Hence, when inflammatory action occurs in the nerve or its sheath, it is brought to a focus here, the circulation is interfered with, and the smallest musculars cause pain and irritation. It is seldom granted us to use this organ in its earlier subacute or chronic condition of engorgment and thickening, but it is pretty certain that we should find a red, swollen organ, with a jelly-like or sero-fibrinous exudate, crowding the sheath space, with here and there bloody extravasations. Now, next to the actual removal of this diseased section, as suggested by Dr. Lloyd, but not likely to be yet generally adopted, to his mind, comes the gentle systematic compressing action by such means as he had suggested, which aids in breaking up old adhesions, and emptying out the engorged sheath, and such other results as aid a re-establishing of the normal elasticity of the parts. This massage does, but no hand can beat the power which this simple agent possesses, nor does the percutor of Mr. Mortimer Granville, so excellent in its results, do any better, and not nearly so cheaply.

Pilocarpin in the Convulsive Attacks of Hystero-Epilepsy, and in Maniacal Excitement.

Samuel B. Lyon, M. D., of Bloomingdale Asylum, New York City, says: In the subject of the hystero-epileptic and kindred neurotic states, which make the victims interesting studies when mentally and morally vivisected, as we see them in the Charcot clinics, it is certainly as desirable to remedy the condition and to restore the self-control to the unfortunates, if possible, as to develop typical cases for clinical exhibition. The hystero-epileptic type apparently does not flourish in the conditions of this country as it does in France, but occasional cases do occur; and an epileptic woman who was under my care a few years since was a good subject, and exhibited the capacity to make a very fair exhibition case, had she received the necessary notice and attention. She developed spontaneously the wrapt and striking attitude of prayer, and all the emotional display which accompanies it, in one stage in the *attitudes passionelles* through which the Salpétriere subject passes, and would have developed other of the phases had she received any encouragement.

In a case of insanity with some hystero-epileptic symptoms, which was observed by me, there was loss of mental control and abolition of will, with true convulsive movements and marked anesthesia. Having failed to obtain any permanent relaxation of the spas-

modic condition by inhalation of amyl nitrite and ether, an immediate and permanent relief was obtained by the hypodermic injection of the muriate of pilocarpin.

It is certainly very desirable to have at hand a remedy which can be administered independently of the concurrence of the patient, and which will relax the tension of the nervous force, as pilocarpin is well known to do in the *status epilepticus*, and may be expected to do in the semi-conscious convulsions of hysteria or hystero-epilepsy; and as some volition undoubtedly remains, and the force of habit is by no means abolished, a succession of experiences of the relaxing effect of the drug may turn the tide of impulse and imagination away from its morbid direction and substitute a wholesome impassibility.

There are occasions of high excitement among maniacal patients in which a remedy that will temporarily calm them, without leaving the immediate or after ill-effects of the powerful sedatives, is much to be desired, and pilocarpin may help us here.

A brief history of the case in which the use of pilocarpin resulted so favorably will be pardoned.

L. H., æt. 30 years, married about 6 years, nervous temperament, insane heredity on her mother's side, when first pregnant, at the age of 25, became flighty and talked disconnectedly, but did not reach a high degree of mental excitement; during a second pregnancy she showed, in an increased degree, the same condition of mental instability as at the first pregnancy; since this time she has at no time been rational, and has been demented to a marked degree; cannot be interested in conversation; wanders about aimlessly; many of her delusions are referable to the sexual system, as that men are plotting to get possession of her, etc.; she has also delusions of persecution, that she committed the unpardonable sin, etc.; has a forboding of evil.

The patient has a history of chronic uterine displacement and probable ovarian disease.

Her condition previous to coming here was described as having been both violent and excited, and controllable with difficulty. She was in an absorbed or dazed condition when admitted, appeared to take little notice of her surroundings. When in the carriage on her way to the hospital she had, what her attendant called, a fit.

The second morning after her admission she had another convulsive seizure, which had the characteristics of hystero-epileptic attacks. She had marked opisthotonos, insensibility of the cornea, temperature of $103^2/_5°$ F., pulse 150 and tumultuous, moist skin, mouth open and dry, contractions principally of the neck with the head thrown backward, and violent convulsive movements which seemed excited to some extent by attempts to hold her, and to be not entirely unconscious. She was given inhalations of amyl nitrite and ether, which only temporarily quieted the spasmodic condition; pressure was made over the ovaries with no effect; she was finally given hypodermically one-eighth grain of muriate of pilocarpin over the left ovary, which was soon followed by a profuse perspiration and a fall in temperature to $101^1/_5°$, the convulsive movement ceased, and consciousness gradually returned, which was followed by a quiet sleep. Previous to the convulsive attack her pupils had been widely dilated; during the convulsions they were reduced to one half their former diameter; during her return to consciousness they were seen to expand and contract quite suddenly, varying with the tension of the general muscular system.

No further convulsions have occurred in the case, but a passive condition has succeeded to her former excitement.

Increasing Frequency of General Paralysis of the Insane.

Dr. H. Rooke Ley, Medical Superintendent of the Prestwick County Lunatic Asylum, England, in the report of that institution for 1888, says:

"The type of insanity has of late years markedly changed, and many kinds of mental disorder, such as epilepsy, general paralysis, and its allied forms of structural brain disease, which may be termed incurable from the day of their development, are now common more than formerly. Insanity, associated with epilepsy, such as is met with in asylums, is nearly always incurable, and general paralytics are a class who go from bad to worse. The statistics of this asylum show that the proportion of patients suffering fromorganic brain diseases among the admissions have more than doubled within the last twenty years. Nearly 25% of the male admissions of 1888 were cases of general paralysis, a disease which, while comparatively unknown in Ireland, Scotland, and among the rural populations generally, is prevalent in an increasing extent in Lancashire, Middlesex, and elsewhere where the proportion of urban population predominates. It would appear as if the general tendencies of civilization in large cities and populous manufacturing districts, are such as to exhaust nervous vitality and predispose to structural nervous degenerations.

The Irish peasant, in his native country, has a marked immunity from these fatal forms of brain disorders, but when transplanted into centers of labor and activity in Lancanshire or Middlesex, he is often apt to break down and acquire a form of mental disease, progressive in its nature, and little susceptible of cure. So increasing is this form of insanity among the inhabitants of crowded communities that the recovery rate, in its supplies from these centers will, no doubt, be seriously modified by it in future. This disease is principally confined to the male sex but of late years has become more prevalent among women, no less than 26, or 6% of the total female admissions last year were suffering from that fatal form of brain disorder."—*Jour. of Nervous and Mental Diseases*, March, 1889.

Two Twins—One Placenta.—Dr. Bemis, in *Mass. Med. Jour.*, reports the birth of twins with but a single placenta.

TRANSLATIONS.

HEREDITARY SYPHILIS.

Series of Lectures given at the Hopital Saint Louis by Professor Fournier. Translated by Dr. Benno von Steinmetz.

Lecture I.

Gentlemen.—The subject of hereditary syphilis is of great importance, and offers three main points of interest, to-wit: Scientific, practical and social interest.

Scientific interest: It is necessary to know if syphilis is hereditary; what part in the transmission of the disease is played by the father, the mother, or the two parents united; at what period of the evolution of the disease the danger of transmission is most to be feared; whether there are no remedies to defeat this heredity; whether time or treatment can dispel the danger.

Practical interest: How shall we treat, how shall we cure hereditary syphilis? At what period is marriage allowable? Is it necessary to treat a syphilitic woman during pregnancy? etc.

Social interest: There is also a social interest of great importance because hereditary syphilis is the cause of such fearful mortality,and is such an important factor of depopulation that the search for a remedy to cure or prevent this disease is of the utmost necessity.

One word of definition before we enter on the subject. What do we understand by hereditary syphilis? Each science has its own language and words whose meaning differs according to whether they are used in a scientific or vulgar sense. For a layman, heredity is that which passes from the parent to the child; for example, if a man has the gout and his son presents the same disease, it is said that with the latter the gout is hereditary; or if a pregnant woman has smallpox, and the fetus which she aborts presents the characteristic pustules, it is also said that the smallpox is hereditary in the fetus. Now in medicine the word heredity has a more precise meaning. It means the transmission to the germ cell of the qualities which exist in both generative cells, the spermatozoa and the ovule, at the moment when the conjunction of the two cells produces what is called fecundation.

Therefore, from this definition we would understand that heredity pre-exists in the generative cell before the act of fecundation, and the example of the above mentioned gout-heredity is correct, whereas the case of variola cited, in which the woman is infected with smallpox at some time of her pregnancy, and the fetus is aborted, covered with pustules, is not one of hereditary, but of post-conceptional infection, or intra-uterine contagion.

Hereditary syphilis, in the medical sense of the word, is that syphilis which existed in the parents before the procreation, and which is transmitted to the germ in the act of fecundation. The child of a healthy woman who contracts syphilis in the third month of her pregnancy, and which child is born syphilitic, has not hereditary syphilis in the proper sense of the word, but was infected in utero. This distinction is of importance, because there is a difference in syphilis by conception and hereditary syphilis; the one is transmitted to a child already formed, whereas the other is instilled into the germ itself; and I will demonstrate that the gravity of the disease is not the same in both cases.

Is it necessary to establish the reality of the existence of hereditary syphilis? No, because its existence is admitted by all physicians, and its reality is a truth so familiar that it suffices simply to proclaim it.

I wish to give you a general idea as to the different ways in which hereditary syphilis shows itself, its manifestations differing so widely that we can divide them into five groups:

1, Syphilitic accidents; 2, syphilitic cachexia; 3, dystrophic troubles; 4, congenital malformations, and 5, morbid predisposition.

Syphilitic accidents are naturally best known, but nevertheless, not the most frequent. They may be distinguished according to the time of their appearance, as, fetal syphilis, if they are present before birth; infantile syphilis, if they appear a few weeks after birth; late hereditary syphilis, if they appear in children 8, 10 or 15 years old.

The general opinion is that syphilis, being a specific disease, will produce only specific accidents and manifestations; but experience has proved that this view is erroneous. Syphilis has the greatest influence on account of the profound derangement which it causes to the organism; it is a disease of the whole being, capable of causing disorders of every organ. The organic degeneration which it causes in the individual attacked, creates a series of accidents called para-syphilitic accidents, which have not been thoroughly studied as yet, and those manifestations exist also in children.

At the head of these manifestations stands the fetal cachexia or unfitness for life of the new being. This inaptitude exists in three different degrees. Sometimes the fetus dies in utero, or the child is born so miserable, so puny, that death comes shortly after birth; and, the child may be born healthy in appearance, but it will fall away and will succumb to the first indisposition.

Next comes dystrophic troubles, general or partial. The slowness of growth is the most remarkable. Each organ of such children seems to develop very slowly; the teeth come late, the children learn to speak late, and their whole development is incomplete. They remain small, puny, and have the appearance of children even after they are grown up. Sometimes the dystrophy concentrates itself upon one single organ, the testicle, ovary, mammæ or the brain. In this latter case we have idiotic children; and, according to the researches of Lannelongue and myself, we have the productions of congenital malformations—hare-lip, club-foot, microcephalus, etc. Furthermore, the children having hereditary syphilis are predisposed to a great number of diseases—meningitis, convulsions, etc. Inquire into a syphilitic family and it will be rare if one of their chil-

dren did not die of convulsions. Rachitis or rickets is also very frequent. Another important predisposition is that to scrofulo-tuberculosis. Gueneau de Mussy has characterized the predisposition to other diseases which syphilis creates by the following sentence: "Syphilis is a dung-hill upon which all corruption grows."

From whom is hereditary syphilis derived? This is the question to which I will now try to find an answer. Does it come from the father, the mother, or the two combined? In the study of this question we find the most contradictory opinions, because hereditary syphilis is a fruitful source of discussion, controversy and dissension among eminent men in the profession.

In the first place, can hereditary syphilis be propagated if both procreators are under the influence of syphilis? As an exception, this is a point which is not disputed, which every body admits. An observation which we have recently received will furnish us proof. A young mother brings a three-months old syphilitic child, covered with cutaneous and mucous syphilides to my clinic. The history reveals that the mother has been syphilitic for the past two years, presenting actual proof of the disease; the father, likewise, has had syphilis for three years, also presenting unmistakable signs of the disease. In this case (the child's) there is no doubt possible; it has hereditary syphilis from both parents.

The injurious influence of syphilis often manifests itself also in a series of pregnancies. In syphilitic families it frequently happens that successive pregnancies are interrupted by abortion or premature birth. Example: A young man contracts syphilis and marries before being completely cured; seven pregnancies ensue in six years. The six first pregnancies are terminated by abortion, the last by a living child at term, but which died of syphilis three weeks after birth.

To conclude this demonstration, we can compare the termination of pregnancies before and after the contraction of syphilis. Before its acquirement the children are healthy; after this event, nothing but trouble follows. Example: A healthy young man marries a healthy young woman; two healthy children are the result of the union. The man afterwards contracts syphilis and infects his wife; the two following pregnancies are terminated by abortion, and the third by the birth at term of a syphilitic child, which dies the next day.

Another young family has three beautiful children. The husband contracts syphilis and gives it to his wife; seven subsequent pregnancies are produced; the first is terminated by abortion, the second by premature birth and death; the third, fourth and fifth are ended in the same way; the sixth and seventh end in abortion. Thus from ten pregnancies three children live, those born before the acquirement of syphilis; the seven later pregnancies give four premature births and deaths and three abortions.

These examples and numerous others make it evident that the question whether hereditary syphilis is procreated by both parents at the same time can be answered in the affirmative.

Now, does hereditary syphilis appear if only one of both parents is sick? To answer this question we must study the subject successively on the mother and on the father, and, to proceed always from the known to the unknown, we will first take the heredity due to maternal origin, and seek to respond to this question: Can a child have hereditary syphilis if the mother alone is affected, the father being perfectly healthy? The answer is almost unanimous; few physicians contest maternal heredity. It appears quite natural, because it is so frequently presented to clinical observation. The process of reasoning is as follows: The child is syphilitic, the mother is syphilitic; consequently, the first derived the disease from the second. In reality, this reasoning is detestable, because it is very possible that the mother, so far from having infected her child, has been herself infected by it, if, for example, she was healthy when impregnated and did not catch syphilis until some time after being impregnated. Two conditions, if we wish to proceed in a legitimate manner, are necessary to arrive at a correct answer to the question which occupies our time at present; the first is well known; the second is seldom thought of.

It is necessary in the first place to exclude paternal syphilis, and have absolute proof that, the mother being syphilitic, the father is perfectly free from it. This is a difficult undertaking, because we must obtain our observation in the midst of people who will not acknowledge their fault. Generally, it is not the young girl, who leaves her mother's petticoats pure and chaste, it is generally the young man who, to marry her, tears himself away from other petticoats. Nevertheless I have been fortunate enough to obtain examples, proving that of which I have spoken.

The second condition, that which is seldom thought of, is the following: It is necessary that the mother has not been fecundated the first time by a syphilitic man, because then we may think of ovarian heredity. You may ask me what is ovarian heredity? It is that mysterious faculty by virtue of which a first impregnation can stamp its peculiarities upon the products of subsequent fecundation caused by other males. Stock-raisers know this fact perfectly and use it to their advantage. At the Jardin des Plantes a jenny ass was covered by a zebra and gave birth to a zebra; she was afterwards covered by stallions of pure blood, but all her fillies had zebra color. You all know well the incident of the white woman who married a negro, and who, after being widowed, married a white man and had children by him whose skin was covered by black spots.

There is no reason why ovarian heredity should not reproduce a diathesis; we must, therefore, to answer correctly the question given above, exclude all cases which the first fecundation was caused by a syphilitic man.

We have observations which offer all guarantees of certainty. They are rare, because in twenty-eight years of practice I have collected only thirteen cases. Thirteen syphilitic women married to healthy men have furnished twenty-eight pregnancies. Three children were

born healthy, seven were born syphilitic, nine died shortly after birth and there were nine abortions.

I will cite a few examples: A young woman was infected by syphilis from her first husband; being widowed, she married another, but this time a healthy young man, and two years after gave birth to a syphilitic child, who died shortly after. A young woman, whose husband is well, and who is well herself, nourishes an adopted syphilitic child and is herself infected, The husband, warned, preserves his health; four pregnancies follow, all of which terminate in abortion. A healthy wet-nurse is infected by a baby; the husband is healthy; six pregnancies terminate in four abortions and two syphilitic children. All these cases and others which I could cite, present the character of hereditary syphilis—abortions, frequent premature births and syphilitic children. For the latter the death rate is fearful, because in twenty-eight pregnancies there were twenty-one deaths. From all these cases we can conclude with certainty that the influence of maternal syphilis or hereditary syphilis is considerable, the more so, if we consider that this clinical result is perfectly in accordance with theoretical induction, drawn from the character of the disease, the anatomy and pathological analogies. Why should not such a disease as syphilis be transmitted hereditarily from the mother to the child, if we remember that the whole system is impregnated with it, and that the fetus in utero is in fact part of the mother herself?

The researches of Mathias Duval and Van Beneden on the placenta have furnished us with anatomical inductions. In the beginning, at least, the placenta is not the interweaving of two independent circulations: it is a maternal hemorrhage, encysted by the fetal elements; the blood circulates in cavities, circumscribed by the fetal cells which are bathed by it. A third order of induction may be drawn from morbid analogies. The placenta is not a perfect filter, bacilli and microbes pass through it. Strauss and Chamberlant have demonstrated that the anthrax bacillus passes through the placenta. Netter has proved that the pneumococcus passes through, and that if a pregnant woman has pneumonia, the pneumococcus is found in the blood, the lungs, etc., of the fetus. Why should the microbe of syphilis, probably so small that it has rendered its discovery impossible up to the present, make an exception?

Thus everything seems to demonstrate the reality of maternal heredity, *a priori*, the inductions drawn from the character of the disease, the anatomy and the morbid analogies; *a posteriori*, the documents furnished by the clinics.

We can, therefore, answer the question posed above. Yes, hereditary syphilis is transmitted from the mother to the child; and we can add that this is the most frequent mode of transmitting hereditary syphilis.—*L' Union Medicale.*

Chloroform in tetamus.—Leon Le Fort is emphatically opposed to the use of chloform in cases of tetanus; he says it only hastens the fatal issue.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,

Editor.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, AUGUST 17, 1889.

Is the St. Louis Coroner's Position on the Embalming Question Correct?

A few days ago the St. Louis daily papers contained sensational accounts of the sudden death and hasty burial of a young woman. The attention of Coroner Frank was called to the matter. He admitted that the suddenness of her death, the reputation of her attendants, male and female, the hasty manner in which the body was embalmed and buried, in fact the whole aspect of the case, furnished grounds for grave suspicion of mal-practice or foul play on the part of some one. Yet he neglected to exhume the body for a post-mortem examination, assigning as his reason the fact that it had been embalmed. This information he obtained from the undertaker who conducted the burial. About two gallons it is stated, we believe, of embalming fluid were injected into the body. The coroner was rather sharply criticised for his action in the matter by one or two physicians in the shape of what purported to be interviews in the daily papers. He being interviewed in turn not only attempted to defend his action in this instance, but declared that embalming, as generally practiced by undertakers, so affected the tissues as to wholly obliterate evidences of pathological conditions, and therefore that it was useless to make post-mortem examinations on bodies that had been embalmed, with a view to discovering facts for the purpose of evidence before courts of justice, etc. Also that the character of the fluid used was such as in supposed poisoning cases, to make it futile to attempt to prove that death resulted from any given poison.

The coroner would certainly find it impossible to sustain himself in this position if he appealed to proper facts and authorities for support. With none of the preserving fluids used for embalming is it possible to

determine definitely what their effects will be on a given pathological condition without an examination, even if we knew exactly the condition before examination. But when we consider the difficulties in predicting what is going to be found post-mortem in any case, to say nothing of a case of suspected criminal abortion, for instance, it is clear no one would be justified in the position Dr. Frank has taken. We remember to have heard reported at the St. Louis Medical Society a case of criminal abortion, where wires had been engaged in the neck or some other portion of the womb and cut off short and left there. Four such pieces of wire that were removed from day to day over the space of about one week, were shown. The woman nearly died. Had she died with some of the wires still engaged as they had been, and had she been embalmed, would the embalming process have covered the evidence of crime? This is an extreme case, but we never can tell what we may find post-mortem.

As to the other, namely, the poison, phase of the question, while the coroner's position from a practical point of view may not seem so extreme, it is yet untenable. Suppose in an embalmed body where arsenic poisoning is suspected, large quantities of arsenic are found, and it can be positively proven that no arsenic was used in the embalming, would the fact of the embalming cut any figure in the matter?

We can readily conceive how the ordinary manner of embalming, namely, the injection of various fluids into the arteries and cavities of the body, may frequently interfere with the detection of crime. But in no instance is there a way to find whether this is a fact except by the proper kind of an examination. We have no doubt, furthermore, that the coroner is striking at what may have been and may be used as a method of concealing crime, but we question whether his position in the above mentioned instance is not calculated to encourage those who would be tempted to make such a use of embalming by this process.

Right here there is a question that deserves attention. Should not the proper authorities determine under what circumstances a body may be embalmed? Would it not be well to allow no body to be embalmed until after the death certificate is duly accepted and recorded?

We hope our coroner will look after this matter further, remembering, however, that he is in an official position, and that even his utterances might establish an unfortunate precedent.

Electricity in the Treatment of Intestinal Obstruction.

M. Herard lately read a paper before the Academy of Medicine, Paris, on the subject of the treatment of intestinal obstruction by means of electricity, his remarks being supplementary to a communication made by M. Larat on the same subject last year.

The method used is that of filling the colon with salt-water by injection and then introducing one electrode into this, the other being placed on the abdominal wall.

Both gentlemen claim to have obtained excellent results with the treatment, even in cases where peritonitis already existed. This fact makes an emphatic response to the objections laid against the method by some that these intestinal 'lavements' were liable to cause peritonitis. M. Herard declares that when that complication manifests itself, it is in all probability due to the affection for which the application of electricity has been made.

But it must be acknowledged that accidents have been occasioned in the administration of this treatment. M. Prengrueber reported the death of a patient from what appeared to be a rupture of the intestine, caused by the too rapid filling of the colon with the fluid. This was an unfortunate accident that should never have occurred, but one that is not less liable to occur in making an ordinary 'large' injection. It is especially recommended to make these injections slowly and carefully. Sometimes, after the seance, patients experience a sensation of heat and smarting at the anus. In view of the fact that the electrode is thoroughly insulated at this point, it is probably due to the irritation of the solution. When it does occur, the substitution of some other salt-solution, such as Vichy, will suffice.

Therefore, the author believes that electrical lavements are really exempt from danger or unpleasant features, and that they ought to be employed before recourse is had to laparotomy.

The faradic current seems to give the best results in acute strangulation; but when the obstruction takes place more slowly, with intestinal paresis, galvanism succeeds better. Both currents may be used alternately.

His paper contains reports of many cases of apparent obstruction which were relieved promptly and permanently by this means.

Improved Technique in Intestinal Surgery.

As will be readily discerned by all those at all conversant with the subject, the contribution by Dr. Brokaw, presented in this number of the Review, is a most valuable one, giving methods of technique that are undoubtedly improvements on even the late improvements of Abbe and Matas.

The facility with which these rings are constructed is not less than that claimed by Prof. Matas in preparing his thick "drum-snare" gut rings; while the superiority of the former over the latter is made evident when it is remembered how quickly catgut absorbs moisture, swells and becomes soft, losing the elasticity and springiness that serve at first to keep the wound-edges in position.

The rubber rings of course are unchanged in consistency or conformation until the catgut that binds their ends together gives way.

The suggestion to make use of the large shot-holes

in the gut in making an anastomatic canal should, at times, serve to shorten materially a tedious, and perhaps, disastrous resection of the gut.

It should probably be confined to cases in which the wounds involve the portion of the gut-wall opposite the mesenteric attachment, for where a bullet has torn out much of the lateral canal-wall, and with it, of course, the blood supplying vessels, for the periphery, the danger of subseqent sloughing of this convexity might become considerable.

Strong testimony for the excellence of Dr. Brokaw's methods is furnished in the almost uniformly successful results of his operations; the only death out of twelve experiments being the result of foolhardiness on the part of the dog.

Dr. Brokaw is continuing his researches and experimental work in this direction,and promises to give us at an early date,statistical results of his operations,together with descriptions and illustrations of the post-mortem specimens.

Two Hearts that Beat as — Two.

A remarkable specimen of anatomical perversion is reported from Pittsburg, by Dr. C. Q. Jackson. The man, a negro, makes a living by going about the country demonstrating his peculiarities to interested parties. He is described as being of ordinary height but of immense muscular development. Dr. Jackson, from a careful examination concluded that the man has two distinct hearts, which usually give visible pulsation under each nipple. He has the power of moving these two hearts independently, and can place them, one at a time, far down into the abdomen, where they can be seen and felt pulsating. He can stop one or both from beating, for a period of a minute and perhaps longer, if he were encouraged to do so. The stopping of either heart stops the pulse-beat on the corresponding side. If both hearts are stopped, no pulsation can be detected in the cardiac region, at the wrist, temples, nor anywhere else in the body. The left heart is the larger.

The man also seems to be possessed of a second set of ribs, which he is likewise capable of bringing down into his abdomen, forming a casing for that cavity. This is uncertain, however, as the thickness and rigidity of his abdominal muscles make a positive determination impossible. The other part of the report is sufficient, anyhow—for summer weather.

Parenchymatous Injections of Camphorated Naphthol in Pulmonary Tuberculosis.

After having detailed at previous meetings of the Societe de Therapeutique the happy effects of the employment of camphorated naphthol in the treatment of certain local tuberculous manifestations of the tongue, pharynx and larynx; scrofulous glands, etc., M. Fernet lately read a paper before the same society in which he related the markedly encouraging results from its use in pulmonary tuberculosis, the medicament being thrown directly into the center of tuberculous formation.

A large number of such tuberculous lesions usually remain for a long time localized at one point, and it is logical to direct ones efforts toward destroying the disease producer before it has had time to become disseminated. At the same time general treatment to fortify the system against the invasion should not be neglected.

The plan is based on the same principle as that used by Pepper, B. Robinson, Truc and Lepine, when injecting creasote, iodoform, carbolic acid, etc. Naphthol appears to the author to be a more powerful germicide and yet unattended with as great risk to the patient as the others.

He spoke of the results obtained from four injections made on four patients having marked lesions at both apices: softening, mucous rales and even cavities were present at the beginning of the treatment. The injections were made once or twice a week through the first or second intercostal space, midway between the sternum and axillary space, with a hypodermic syringe, the needle being longer than usual. Each injection contained 15 centigrams of beta naphthol.

The effects were, at first, slight pain in the skin, none in the lung; later, slight pain or numbness; in two cases there were nausea and vomiting, in one, weakness; coughing sometimes occurred during and after the injection; it was not troublesome in most cases, but seven times out of forty-one, it was violent and suffocating, and at times accompanied with the expectoration of blood.

As to the after effects of the taeatment, in three of the four cases, there was marked amelioration of the symptoms; the fourth left the hospital in moderate state of health.

In all, expectoration was distinctly diminished, becoming more fluid and less purulent; the mucous and gurgling rales became less prominent and almost disappeared in some.

Notwithsanding the inconveniences connected with the method, the author thought the results were encouraging. The disagreeable features could be obviated; by substituting a less irritating vehicle than camphor for the naphthol, such as oil, for instance, the coughing spells would be done away with.

MEDICAL ITEMS.

Texas Fever in St. Louis.—It is reported by a veterinary surgeon that Texas fever is begining to show itself amongst cows in St. Louis.

Fournier's Lectures.—Through the kindness of Dr. von Steinmetz, we are enabled to present with this issue of the Review, the first of a most valuable course of lec-

tures on "Hereditary Syphilis", recently delivered at l'Hopital St. Louis, Paris, by Alfred Fournier, the renound sypilography. Our readers will find it to their advantage to overlook none of these lectures, which will appear *seriatim* until the full course is completed.

THE TIMES AND REGISTER.—The process of accretion, pursued by the *Times and Register*, goes on apace. It now announces the addition of the *American Medical Digest* to its pyramid of "absorbed" journals, and of Drs. I. N. Love, of St. Louis, and Simon Baruch, of New York to its editorial staff. Each of these gentlemen wil lhave charge of all editorial matter pertaining to their respective states.

INTERNATIONAL CONGRESS OF HYPNOTISM.—This congress was in session at Paris from the 9th to the 12th inst. M. M. Charcot Brown-Sequard, Azam, Brouardet, Richet and Lombroso were honorary presidents.

The Objects of the Congress were: 1. To fix the terminology of this science; 2. To investigate and determine the real progress made up to the present time in the domain of hypnotism.

In order to conserve to the congress its exclusively scientific character, the committee determined not to accept any communications that did not relate to the chemical, medico-legal, or psycho-physiological applications of hypnotism.

"As for me personally," wrote M. Pasteur last week to the Lord Mayor, "the suffering of an animal affects me so much that I would never shoot a bird, and the cry of a wounded skylark pierces me to the heart." To M. Pasteur's humanity and tenderness of heart emphatic testimony has been borne by all who know him, including Sir James Paget and others, whose testimony would be overwhelming if testimony were needed, and this notwithstanding Lord Coleridge's unfavorable reading of his photographic presentment, and the hasty conclusions which he drew therefrom in the judicial obiter dicta which will long be remembered against him.

SMELL-BENIGHTED CHICAGO.—Hardly had Chicago's rever ceased to pour its murky emulsion of cats and dogs into its water supply, giving the unhappy citizen time to draw a sigh of relief and a breath of much needed fresh air, when an embarrassing entanglement of city red-tape brought about an odor that, although not wholly unfamiliar, is as bounteous and far-reaching as it is forceful. It is unique, however, in that it has not that composite flavor that usually characterizes Chicago smells.

The trouble arose in this way: On July 31, the body of an unknown man was found on the lake shore and was placed in the morgue. The same day the coroner held an inquest and issued a burial permit For some reason the body was not removed. The county undertaker usually delegates some local undertaker to remove unknown bodies, but as this one soon became badly decomposed, the local undertakers would not touch it for the fee of $6 which the county allows in such cases. As a result the body remained at the morgue and daily grew more pemicously active in its emanations. The health officer lent what assistance he could bring to bear in the matter, by fumigating the morgue, but this did not quell or palliate the difficulty. He thereupon philosophically concluded that it was dangerous for anyone to go near the body, as the "germs arising would be likely to cause disease." The lieutenant of the police said the police were not concerned, as, when the body was given to the coroner their duty was ended. He says that the trouble must be between the coroner and county undertaker. The coroner's burial permit was issued the day the inquest was held, so that his part of the contract ended there. The situation cannot be better described than by the classic language of Koko, "here's a how d'ye do!"

BROWN-SEQUARD'S TREATMENT.—The daily press teems with reports from different parts of the country detailing apparent successes—whether only temporary or otherwise as yet undetermined—with Brown-Sequard's injection method of attaining rejuvernation. Of course little reliance can be placed on these reports and the readers of the REVIEW will await the appearance of more reliable reports in its columns before placing their faith on either one side of the controversy or the other.

CORRESPONDENCE.

EXPERIENCE WITH THE ELIXIR VITÆ.

ST. LOUIS, AUGUST 16, 1889.

EDITOR WEEKLY MEDICAL REVIEW.—I scarcely know how to respond to your very kind request to write up my experience with the so called Brown-Sequard "elixir of life"; however the first thought to one examining the fluid with a microscope is much more likely to be that he is looking at a *lively* or live, than a life mixture. From the first, I have expressed myself as having no confidence in the medicinal effects of this elixir other than what may follow a psychical impression. It might be harsh and unjust to style it the dotage dream of a prince in physiology, but milder language of similar import might couvey an idea of the impression I have *ab initio* entertained. And what was then an impression, notwithstanding the startling reports of marvelous results, following the hypodermatic use of the mixture, which daily appear in our newspapers, *ad nauseam*, has after careful experimentation with, to be sure, but a limited, yet I think a sufficiently large, number of patients, when I take into consideration the time and labor wasted, become a conviction ; and I am satisfied with the proofs of the faith that is within me regarding the so called "Brown-Sequard Elixir Vitæ."

I have no faith in its re-vitalizing influence, unless to inoculate one with micrococci, bacteria and baccilli—living organisms, but too frequently death-producers—

is to re-vitalize. It is an old saying that "in death there is life," but for some years we have heen almost unconsciously formulating another sentence composed of exactly the same words, and equally true, but of just the opposite significance, *i. e., in life there is death.* The introduction of myriads of living organisms into bodies previously unoccupied by these death-dealing germs, has doubtless been effected during the past two weeks to an alarming extent. For, it is but reasonable to suppose that the haste to as quickly as possible introduce the elixir before the *dynamic* (?) power resident in the living (?) molecules of matter before the cells, not spermatic, had really become dead matter, has precluded the use of the microscope in 999 out of every 1000 instances in which it was used.

One of the patients on whom I experimented three times, was unable to sleep half as much as usual, and complained of unusual dryness of the mouth on the night following a one-drachm injection. Another one had a copious and fœted sweat the night following an injection of one drachm, made at 8:30 P. M. and would not allow a second use of the elixir(?). Another, still, had an attack of vomiting and diarrhœa during the night following an injection about 5 P.M., and did not present himself for a second experience.

No other symptoms, either favorable or unfavorable, were observed. But four patients were experimented with.

On two occasions I discovered tubercle bacilli in the preparations made from material obtained from what appeared to be perfectly healthy sheep. It is needless to say that these mixtures were not used.

I invariably filtered the mixtures befoe rusing them; this should have removed most, if not all, of the bacteria that might have been in the distilled water used, but in nearly every instance, in about an hour and a quarter after the compound had been formed, bacteria be seen; and on several occasions, bacilli were present. The bacterium termo predominated. Next in frequency was what I took to be the vibrio ruguda. In one sample I found a number of vibrio serpens. Three hours and fifteen minutes after removal of the gland from the scrotum. One specimen was literally crowded with vibriones rugudæ and bacilli of tuberculosis. My friends Dr. S. S. Porter and his son, of 2924 Chestnut street, and I spent hours together over this sample.

On one occasion, thirty-five minutes after removal of a gland from the scrotum of an animal that had been nearly killed, but not quite, an hour, before examination of the elixir (?) by Drs. Waldo Briggs and George C. McCosh and myself, we discovered a great many bacteria termo and bacilli; the latter seemed to be the vibriones rugudæ.

While doing the microscopical work in connection with my experiments, I was astonished to note the frequency with which I observed two, and sometimes three, spermatozoa with thin heads (or bodies) laid one almost exactly on top of the other (side to side), appearing like but a single spermatozoon with two or three tails.

In one instance I could not find a single live spermatozoon twenty minutes after the death of the animal from which the parts were removed; while in another instance, eighteen hours and thirty minutes after the death of the sheep, and eleven hours after the placing of the drop of elixer (?) under the cover of glass, I discovered living spermatozooa.

All of my material was taken from what was supposed to be healthy sheep, about eight or nine months old. And all implements and instruments used were carefully sterilized before each time the mixture was made. Neither eruptions, flushings, nor abscesses have followed any of the experiments.

ALEXANDER B. SHAW, M. D.

A NEW SYMPTOM OF PERICARDITIS.—In some cases the diagnosis of effusion into the pericardium is difficult; and a symptom, first noted by Bamberger, is said to be constantly present, and to aid materially in arriving at a correct conclusion. Puis, in the *Wiener Med. Woch.* early in this year, has again attracted attention to the point. By percussion of the patient in a sitting position, or when lying on the right side, there is a muffled tympanitic resonance or diminished resonance over the left side of the thorax behind, extending downward from the angle of the scapula; and at the place of greatest loss of resonance there is distinct bronchial breathing and bronchophony, with increased vocal fremitus. If the patient is made to bend forward, a portion of the dullness completely disappears, another portion becomes tympanitic, and no bronchial breathing is heard. This change is more marked still if the patient assumes the knee elbow position. The physical signs observed are ascribed to compression of the lower lobe of the left lung by the fluid in the paricardium and is found chiefly in young adults with chests which are elongated or narrowed antero-posteriorly. The presence of pneumonia or pleuritis is contra-indicted by the alteration of the physical signs when the position of the patient is changed.—*Med. News.*

SOCIETY PROCEEDINGS.

PHILADELPHIA OBSTETRICAL SOCIETY.

[CONTINUED FROM PAGE 113.]

Regular meeting Friday, June 7, 1889, the President, Dr. Theophilus Parvin, in the chair.

DR. GEORGE E. SHOEMAKER reported a case of "Puerperal Septicemia." Operation not indicated. Autopsy.

Because of the interest which attaches at the present time to the question of the place of laparotomy in the treatment of post-puerperal trouble, this case is report-

ed. It is one in which the question of operative interference was weighed and decided in the negative—correctly, as was shown by the autopsy.

B., æt. 26 years, Irish, having had one child with indefinite history of after-trouble at that time, was delivered, April 23, of a small male child before full term.

At five and one-half months she had had a free hemorrhage from the vagina, which was stopped under another practitioner's care. Three days prior to the labor, while asleep in bed at 3:30 A.M., she was again seized with free bleeding. She sent for another practitioner, who gave ergot, and the hemorrhage ceased. There was no pain, and the ergot did not bring on labor. Just forty-eight hours later, while again asleep in bed, another free hemorrhage occurred, again without pain. Several hours later, or two days after the first hemorrhage, the writer was called.

The bedclothing, body linen, and mattress were much soiled by large quantities of dried blood. The vagina contained considerable offensive clot, the os was dilated to the size of a half-dollar, and was occupid by clot, the pains were absent, the child living, and presenting L. O. A. The margin of the placenta was easily felt posteriorly and to the right, so that, as might be expected from the history, there was partial placenta previa.

Efforts to remove the septic surroundings were begun at once. The nurse in attendance, ignorant and unclean, with a suppurating skin eruption in the palm of her hand, was discharged, and a trained nurse obtained from that admirable charity, the Visiting Nurse Society. Soiled clothing was removed, a vaginal bichloride of mercury douche given, the matted pubic hair cut off, and the patient's body and hips thoroughly bathed in 1 to 1,000 sublimate solution, this being a greater strength than would have been used but for the decomposition. All this was several hours before the labor terminated; and from a time at least four hours prior to delivery, strict antisepsis was maintained by the free use of mercurials on hands and about the patient. It was too late; the decomposed blood had poisoned the system before delivery,—a clear case of ante-partum infection. Hemorrhage did not recur, so that no measures were necessary for its arrest after the writer assumed charge of the case. It was the intention to perform version at once on its recurrence, as much blood had been lost and the child was weak. The labor terminated spontaneously without complications, the child being alive and the mother in fair condition, though with apparently some rise of temperature. Unfortunately the thermometer was not used. A 1 to 4,000 bichloride of mercury hot intra-uterine injection was given immediately, but the temperature rose above 103° eight hours later; that is, too soon for post-partum infection under the circumstances. There was, however, no tenderness over the uterus, no pain, no sign of peritonitis, and no abnormal odor to the lochia, which were apparently normal. Another 1 to 4,000 bichloride injection was, however, carried into the uterus, and the treatment with quinine and whisky begun, which lasted throughout the case. Epsom salts, ʒss, hourly till the bowels moved disturbed the stomach without improving the general condition later.

There was no decided change for four days; the fever reached about 103° in the afternoon, but the stomach acted well and the strength was fairly maintained. The lochia were without abnormal odor and of fairly natural appearance till the end of the second day, when the injections were stopped, to be resumed later on the appearance of slight odor. There was at no time any great tenderness about the uterus or over the abdomen, which remained soft and undistended. As the case progressed, no definite local complications appeared. There was no uremia and no sign of mercurial poisoning; the bowels acted well. On one occasion a considerable swelling occupied the abdomen in the median line below the umbilicus. At first glance it was supposed to be the uterus distended by clot, but when light pressure by the hand was made upon it, much to the writer's surprise the swelling at once and permanently disappeared, while at the same time there was an audible escape of gas, probably from the vagina.

From the patient's mental condition, exact information was not obtainable, and there was no opportunity to repeat the experience. Was this physometra? The pelvis was repeatedly examined, but no acumulations could be felt. There was evidently no considerable amount of necrotic material in the uterus, for the discharges did not indicate it. There were no symptoms of peritonitis at any time, and in spite of the fixed determination of the patient to die, the outlook was fair until after the fourth day. From this time till the eighth and final day the progress was downward. The temperature became 104° in the afternoons, with violent active delirium, obstinate insomnia, and profuse perspiration, especially at night. The stomach and intestines remained in fair order, but the nervous condition was very bad.

The temperature rose on the morning of the eighth and final day to 106.6°, and the patient died of exhaustion. No attempt at laparotomy was made, because none seemed indicated in the absence of peritonitis or any sign of definite pelvic trouble. With the utmost difficulty, permission was obtained to make an autopsy, the husband being present to see that nothing was removed.

Autopsy, twenty hours after death: rigor mortis; emaciation; abdomen very slightly distended. Abdominal cavity contained the usual amount of serum, which was pinkish red, not turbid; contained no flacculi, but simply stained muslin without leaving residue. No sign of lymph exvdate or pus. Peritoneum and intestines pale and smooth without any adhesions and without hemorrhagic spots. Intestines not over-distended. The uterus, as large as a fist, was distended by gas, and when compressed remained collapsed like a bag. It was pale bluish white in color, incision showing the walls to be about one third of an inch in thickness; the cavity empty of all fluids. A pinkish red,

thin, transparent coating of mucus covered the lining membrane. This mucus was not abundant enough to flow—simply a coating. It was examined under the microscope and found to contain no pus, but to be made up largely of epithelial cells of various ages, showing very marked fatty change. The large amount of fat was remarkable.It was not extraneous, as no lubricant could be obtained for use on the hands. The left tube was of the size of the little finger, and when first touch ed apparently contained gas like the uterus. It collapsed with handling, but no liquid could be found in the uterine cavity which could have been squeezed from it. It was not adherent, and when delivered with the ovary through the abdominal incision and incised did not look unhealthy, and contained no fluid. The right tube was smaller, and contained no gas. It was adherent to the uterus and the right side of the pelvis by old adhesions, but was delivered with the ovary through the abdominal incision, incised, and found empty. Both ovaries were of normal size, the tubes of a bluish pink, and pale like the other organs and the peritoneum from loss of blood. No collection of pus or any source of infection, removable or otherwise, could be found in the abdomen or pelvis. Other portions of the body were not examined, owing to the exigencies of the post-mortem. There had, however, been nothing to call attention to them. The cause of death then was general septicemia, with no continued source of infection near the point of original departure.

The question of the treatment of post-puerperal septic conditions by abdominal section, as suggested and practiced by Mr. Tait and others, is one of great importance. The reports of successful cases demonstrate beyond doubt that in laparotomy a new and very valuable means of combating some forms of a fatal disorder has been developed.

Just now we are in need of more definite clinical knowledge as to when the belly should and when it should not be opened. Where peritonitis persists, the profession is rapidly reaching the conclusion that laparotomy increases the patient's chances, or, if there is a distinct purulent collection, that it affords almost her only chance.

Whether pus is to be found in the peritoneum, in the tubes, or in the connective tissue, whose intercellular spaces are continuous with the lymphatic vessels, its removal, followed by drainage, is unquestionably indicated. Where the uterus itself is infected to such a degree that the local use of dull curette and antiseptic douche will not remove the source of infection, there is nothing suggested which is more promising than hys terectomy, though in practice this is likely to prove disappointing from prior general infection. It must not be forgotten, however, in these days of readiness for operation, that there are cases, such as that here reported, where there is early a general infection, not from pus, for there is none formed, nor yet from any remaining focus of infected material; and where it would be just as useless to incise the peritoneum or remove tubes as to remove the stomach hours after a poisonous dose of atropia. There are some cases in which, if they go on long enough, abscess may form late, especially from emboli, where phlebitis exists; but the pus may lie in lung or brain, as well as in more accessible localities, and the hope of recovery does not lie in laparotomy.

What is demanded therefore in each case is a careful study of that case by itself, and repeated examination for foci of infected material. When these are found, they should be removed, if accessible, at the earliest possible moment, and by any safe means which will thoroughly do the work.

Discussion.

Dr. William H. Parrish—The question of laparotomy for septic infection accompanying or following labor is one of great importance. Doubtless many errors have been made in not opening the abdomen, while against this is the fact that at the present stage of abdominal surgery, we should be on our guard that we do not go to the other extreme and open the abdomen in cases of septic infection following labor, when the operation is not indicated. It has so happened that in an acquaintance with the Philadelphia hospital, extend- over fifteen years, I have seen a goodly number of autopsies in cases of septic infection after labor. I have seen few instances in which the autopsy showed that laparotomy would have been of any special value. Where there has been a pus accumulation without fatal general septic infection preceding it, and that pus cavity is so located that it can be opened and drained or entirely removed, the operation is a proper one. If there is reason to believe that there is an accumulation of pus in the peritoneal cavity, it will be right to open the peritoneal cavity and remove the pus, provided the woman is not in a moribund condition. There are, however, cases in which the purulent peritonitis develops very late in the history of the case. There are not a few instances in which the septic infection, as it has extended from the uterus, shows its local effects in the lymphatics, and the fatal result is probably determined before the peritonitis takes on a very active form. I am sure that I have seen this occur. In an endemic in which twenty or thirty autopsies were made, we found the peritoneum in various stages of inflammation. Cases that died early showed inflammation of the lymphatics, and the formation of pus in the lymphatics, particularly of the broad ligament and uterus, with swelling of the areolar tissue and degeneration of the peritoneum. In other cases, the condition was more advanced, with the formation of lymph and flocculi and turbid fluid in the peritoneum. In other cases, where the patient lived still longer, we found a larger quantity of purulent looking fluid. I believe that if these cases had been operated on, the result would not have been favorably influenced. In fact, I think that in some the fatal result would have been promoted by operation. It requires more judgment, and I think probably more skill, to determine when the abdomen

should be opened in these case than to do the operation.

I have in a few instances opened the abdomen after labor, and as I think, have thereby saved the patient. It has so happened that in all the cases in which I have opened the abdomen after labor that the pus has been in the areolar tissue of the pelvis. These cases have recovered. I have not operated on a patient after labor who has not recovered. I do not recall a single instance of pus in the tubes. There was a limited quantity of thickened fluid, but nothing like pyosalpinx. I think that this is rare, especially in endemic septic infection.

Dr. J. M. Baldy.—I agree with Dr. Parrish in regard to the difficulty of deciding which of these puerperal cases are subjects for operation and which should be let alone. At one time I thought it was rather easy to distinguish ; but as cases came one after another into my hands, I found it extremely puzzling to know what to say. If there is pus in the tube, which I found in one case, it is easy to settle the question. It is often difficnlt to say whether or not there is pus at all. In the vast majority of cases in which I have been asked to decide for or against operation, I have advised waiting, and all of these cases have recovered, showing that there was no pus. If you can make up your mind positively that there is pus or purulent fluid, there would be no question as to the advisability of operating. I should not wait because the woman was far gone, in the hopes of bringing her up. I think that the pus is at the bottom of the trouble, and that the only way of saving her is to stop its absorption at once, by removal. The great difficulty is to decide whether pus be present or not, and it requires caution, or we shall be led into many operations which will be unnecessary.

I think in the case of Dr. Shoemaker, that the question of operation would not have come up at all. It was not a case of peritonitis, nor were there symptoms of local trouble. From the report I can see no indications for the use of the knife. I think that this was clearly a case of absorption of ptomaines, and in such a case there would never be formation of pus.

Dr. M. Price.—I have had rather an unfortunate experience with this operation. In three cases that I have had there has been persistent vomiting. For days there had been fever and quickened pulse and a well-marked chill. Upon examination there was unquestionable evidences of pelvic inflammation. In one case tubal trouble was well marked, and the uterus could be mapped out from the tubes. In this case the operation was performed on the eleventh day, after it had been determined that the woman had peritonitis. Three pints of pus poured out. The pus had burrowed up behind the kidney on either side. The case was fatal.

The second case was one of criminal abortion, where the girl fell into Dr. Musser's hands at the last mimute, and he sent her to me. Within six hours I operated and found three pints of pus. No well-marked tubal trouble could be found. All the surroundings were in a semi-gangrenous condition. The patient died.

The third case was seen a few weeks ago. The pelvis was as solid as if it had been frozen. She had a chill and the broken tea-leaf appearance of the vomit. She finally consented to an operation, and on opening her, from one to two pints of pus escaped. Nothing was done but to open the belly, break up the inflammatory adhesions, wash out the cavity, and use drainage. In these cases, I think that early operative procedure would have given the patients a chance for their lives. If I were to-night to see a case of septic peritonitis where there had been a chill, some distension of the bowel, a fixed condition of the uterus, I should not hesitate longer than to obtain my instruments.

Dr. J. Price.—Dr. Parrish has well selected his cases ; he has not made any mistake ; he has operated in suitable cases, and others he has permitted to die because any operative interferenc e would have simply hastened death. In all the cases in which we have operated, we have been able to place our fingers on something before operating. The cases reported by my brother were all dying. It is unfortunat e for surgery that we should be forced to operate on a dying patient. A large number of puerperal cases have been saved. Dr. Baldy has saved two cases. I have had a number in my own practice. Dr. Bernardy has had one, and I could cite a number of other cases. In none of the cases cited by Dr. Parrish did he put his hand on anything on which to operate, and he cannot cite a single case in which he opened the abdomen when he should not have done so.

Dr. W. H. Parrish—I wish to add one word in regard to operating when the conditions seem to be fatal. I did not mean to say that I would not operate on an abscess, believing such to be present, when the patient is very ill. In one instance, I removed one and a half gallons of pus from a patient in a conditions of extreme emaciation and almost ready to die. She is now well. I should hold off from operating in a case in which the blood-poisoning was so great that there was no possible hope for recovery. Where there is an encysted abscess, the patient will live a long time; but in endemic diseases with dense septic infection, the patients, even when first seen, are often so ill that exploratory incision would certainly not be a proper thing to do, inasmuch as it would add to the mortality following surgical operations and deter others from operating and other patients from being operated upon. If there is reason to believe that there is a pus cavity, I should operate if the patient was almost in extremis. Where, on the other hand, the blood-poisoning was the main trouble, I should not open the abdomen as a matter of exploration.

[to be continued.]

Valerianic ether, in pearls containing five minims, proves a very useful stimulant for anemic women subject to fainting fits and attacks of pain in the region of the solar plexus.

ORIGINAL ARTICLES.

ALCOHOL AND THE NURSING CHILD AGAIN.

BY S. HENRY, M.D., CAMP POINT, ILL.

The WEEKLY MEDICAL REVIEW of July 20 contained an article from the pen of Dr. DeArmond, which suggests thoughts of the greatest moment to the human family—questions that pertain to their physical, mental, and moral well-being. They are questions which physicians ought to be prepared to answer better than any other class of men. And yet there are those who know almost nothing of the anatomy or physiology of the human system who treat these questions more dogmatically than the men who could give a philosophical reason for the faith that is in them.

Alcohol is too powerful a drug to be prescribed by any one who has not a clear idea of what he wishes it to produce, and the dose necessary to produce the desired effect. Therefore, very intelligent, conscientious physicians must heartily join Dr. DeArmond in his protest against the reckless prescribing of intoxicants.

Annually, thousands of our fellow citizens wreck their fortunes, their characters and their lives by the use of alcoholic liquors. But does it logically follow that physicians should abandon their use as drugs? Were the profession to stop prescribing them would it greatly diminish their use as beverages? The inspired apostle prescribed wine as a medicine. Shall uninspired men assume to be wiser than he? Noah was drunk before we have any account of the use of intoxicants as drugs. Thousands of our fellow men are using opiates to their own injury and to the detriment of society. Shall we therefore cease to prescribe opiates? I am sure the profession, almost to a man, is ready to answer, No!

From all that is known on the subject, is there any ground to fear that a babe, that is nursed by a woman who imbibes one ounce of beer three times a day, will be injured by the alcohol in the beer? Has alcohol ever been found in the milk of a woman who had not consumed more than one drachm of alcohol three times a day? Is it not a fact that when alcohol enters the circulation in such small quantities, its carbon and hydrogen are oxidized in the blood? That none, or almost none, of it, is found, either in the secretions or excretions?

I fear that Dr. DeArmond's judgment has been warped by the atmosphere which he inhales. He seems to imagine that when we prescribe beer for a lady there is danger that our prescriptions may create in her an uncontrollable appetite for beer. The fact ought to be indelibly fixed upon every mind, that no one becomes an oinomaniac until he, or she, has time and again drank to intoxication. Surely no physician prescribes beer for a lady to intoxicate her. If a lady increases the dose, she, and not her physician, is responsible for the result.

Ever since the day when Adam said: "The woman whom thou gavest to be with me, she gave me of the tree, and I did eat," the transgressor has manifested a disposition to lay his guilt on some one else. It remained, however, for the nineteenth century to witness the amazing spectacle of moral reformers trying to aid the drunkard to shift his guilt to the shoulders of another. And just in proportion as men have busied themselves in this way drunkenness has increased.

I agree with Dr. DeArmond that drunken parents are liable to, and very often do, beget children that are objects of commiseration. And I agree with him that physicians should be as active and earnest in their efforts to elevate the human family as any other class of men. There is one truth that must be taught and emphasized, viz., that men do not have a right to drink to intoxication. The State must, sooner or later, prohibit drunkenness, and adopt efficient means to insure the enforcement of such a law; if necessary by treating the inebriate as an insane individual; by appointing a conservator to take care of his property, so that he will have no means wherewith to purchase intoxicants.

It is to be deplored that physicians do not rise en masse, and protest against that legislation which prohibits any man from selling alcoholic stimulants for medical purposes. This act is not morally wrong; it is, therefore, morally wrong to make it a crime. I know very well, the object is to make it impossible for men to obtain intoxicants to use as a beverage. Now I assert, without fear of successful contradiction, that were we to make it impossible for men to get intoxicants to drink, instead of promoting temperance, we would make it so that no one could possess this virtue, in the sense in which this term is now used. Virtue is a merit, the reward of choosing to do right and refusing to do wrong. Were it impossible for men to obtain intoxicants there could be no choice in the matter. There can be no merit in not doing what it is impossible for one to do. To hope to promote morality by making it impossible for men to use their wills, is as irrational as it would be to attempt to produce a nation of athletes by making it impossible for the rising generation to use their muscles.

RAILWAY SPINE.

BY JOHN SCHILLING, M.D., MILLSTADT, ILL.

Having read Dr. Bremer's Contribution to the Study of Traumatic Necroses (Railway Spine) in the REVIEW, VOL. XX, No. 1, p. 15, in which he laments the little progress that had been made towards explaining these affections, I would like to advance a few ideas which might be welcome to him and others.

Regarding the pathological condition of the nervous system in "Railway Spine," we must say from post-mortem examinations that it is *nihil*, i. e., there is no visible material change—no demonstrable substratum—

no coarse lesion. Dr. Shaw's minute extravasations have never been found, hence his embolic theory is untenable. However after some length of time sclerosis appears, but only as the result of the non-use or functional inactivity of the nerve-fibers and nerve-cells, controlling or representing the paralyzed parts. The real nervous tissue (the fibers and cells) atrophy, just as any other tissue or organ, when not exercised, and the connective tissue hypertrophies correspondingly—which is sclerosis. The fallacy of Hammond's anemia and hyperemia theory, I think, is sufficiently shown by Dr. Bremer's arguments. As there is no coarse and perceptible microscopical change, the affection is termed a neurosis and Dr. Bremer is right in calling it, further on, a neurasthenia. It is indeed a lack of nerve-force, giving rise to an enfeeblement of all functions, mental or bodily. Railway spine is produced by fright or alarm during a collision on the track, accompanied or not by an actual injury. The fright or the shock induces a sudden discharge of nerve-force, indicated by muscular contractions, starts, spasms, etc., followed by weakness or even paralysis. This excessive explosion of nerve-force, as we may call it, in some way or other changes the molecular arrangement of the nerve-tissue, so as to make it unfit for the normal performance of its functions. This molecular change is of course invisible, but we judge of it by its effects, the motor and sensory paralysis, the spasms and hyperesthesiæ and the manifold symptoms of an enfeebled and even deranged mind; the fibers now do not transmit, and the nerve-centers do not generate, nervous impulses normally. The injury to the head has but little or nothing to do with the molecular lesions of the nervous system; for the paralysis may be equilateral or bilateral; nor do the various other symptoms stand in any relation to the injury. Hence it is evident that not the latter but the fright—an emotion, sudden and depressing—is the main factor in the causation of railway spine. In it all the functions of the body are enfeebled, hence there is only a partial display of life-force, a partial activity of the nervous system which shows itself principally in diminution or perversion of mental phenomena. Thus there are hysterical exaggeration—hypochondriacal anxiety and various hypnotic states and even delusions or hallucinations. But all these are due to diseased conditions of the nervous system. The patients are not necessarily all malingerers. The golden rule in Dr. Shaw's case does not prove what Dr. Mulhall claims. The affection is mainly an emotional one—there is great depression of the spirits. Why should not such a joyful event as getting a big sum of money counteract slowly the effects of the fright and gradually elevate again his emotions and mind? Joy makes one jump. Why should it not cure a hysterical paralysis? The pleasure over so much money induces the patient to increase his muscular efforts more until eventually the nervous mechanisms have regained their former tone—until the fibers and cells have been reopened so to speak. Furthermore, the objective examination in these cases cannot be relied upon. The lack of will-force—hysterical it may be—for instance, produces aphonia. Coughing is a simpler process than speaking and may still be possible, when the latter is not. And a patient may auto-suggest to see but one image through a prism and yet be truthful, although self-deluded. He is no more a malingerer than most of our soldiers seeking pensions. He exaggerates his disease for the purpose of getting money, but this exaggeration depends on a morbidly weakened state of mind, sometimes approximating real insanity, caused by the derangement of his nervous system during the collision. Dynamical injury is an appropriate name for such conditions, as long as we do not know their real nature. That the latter must be sought for in some kind of a molecular change of the nerve-tissue, is all that the present status of knowledge permits us to assert. But to return: If the loss of a limb gives one the right to claim damage, it should also be allowed for neurasthenia acquired in a similar accident. The treatment of these affections is very well delineated by Dr. Bremer—to tone up body and mind, which all depressing emotions require alike. If paralyses have existed long enough and have resulted in more permanent tissue-changes—in atrophies or scleroses of the muscular and nervous mechanisms—full recovery is impossible, although even then under proper treatment and favorable surroundings considerable improvement can take place.

TRANSLATIONS.

HEREDITARY SYPHILIS.

Series of Lectures given at the Hopital Saint Louis by Professor Fournier. Translated by Dr. Benno von Steinmetz.

Lecture II.

Gentlemen.—In my last lecture I tried to demonstrate that hereditary syphilis can be transmitted either from both parents united, or from the mother alone. To-day we will look into the following question: Can hereditary syphilis be transmitted from the father to the child? Until a relatively recent period, this mode of transmission was admitted by all, and Cazenave has even claimed that it was the most active and frequent mode of transmitting the disease.

It is only since 1851 that works on syphilis have appeared showing a tendency to restrict the paternal role in the transmission. This tendency was at last carried to such an extreme that the influence of the father in this heredity of syphilis was regarded as nil, and all children of syphilitic fathers were judged healthy born.

This, gentlemen, is an entirely erroneous and false doctrine; and this question is not one of purely theoretical importance, but this error may he fruitful of considerable injury and grave consequences. For instance, if the latter stand be taken, marriage might be permitted to a syphilitic man, who, if the opposite side prevailed, would be restrained from marrying, from the fear of procreating diseased children.

This dangerous error, which I refute, is one doubly false because the conditions claimed for it are not demonstrated, and they are even contradicted by clinical experience.

Let us examine in detail the arguments presented by those who claim that the father cannot transmit syphilis to the child.

In the first place, they claim a manifest disproportion between the number of syphilitic husbands on the one hand, of children born afflicted with hereditary syphilis on the other; the number of syphilitic men is considerable, the number of syphilitic children very small. This is very true; there are a great many less children afflicted with hereditary syphilis, than syphilitic fathers. but what can be deduced from this statement? Simply, that hereditary syphilis is not transmitted in every case in which it might be expected; that it is an accident which is more or less rare. But we must not conclude from this that it does not exist.

The second argument worked by our opponents is this: Many times does a syphilitic man marry a healthy woman, and beget healthy children. We have certainly all seen men who were not entirely cured of their disease procreate healthy children; but what conclusion can be drawn from this? That paternal hereditary syphilis is not possible? Assuredly not. It can only be inferred from this that the heredity is not in every case transmitted. All these are only negative facts; and negative facts have only a limited value; they signify that such and such a phenomenon is not produced under such and such circumstances; all the negative facts in the world cannot disprove one positive fact. Thus, these arguments cannot prove that paternal heredity does not exist.

The seminal fluid of syphilitic subjects is not inoculable in healthy subjects. This is the third argument to be answered. Like the foregoing, it affords a true fact, which can be supported by two kinds of proofs. We will first take the indirect proofs. If the sperm would transmit the disease, we would indeed have a lamentable spectable to contemplate and would find every woman infected, who had had connection with a syphilitic man. There would be a great number of married women, who would catch syphilis as soon as married; on the contrary we know that transmission is not realized, if the husband do not present exudative or suppurating sores.

There are also positive proofs of the non-inoculability of the sperm, because Mireur and others have made numerous experiments, but all their inoculations were fruitless. From all these proofs we can conclude that the sperm is not inoculable; but can it be concluded also that, because it is not contagious by inoculation, it cannot contaminate the ovule? Assuredly not, because there is an immense difference in the effect which the sperm can exercise upon the organism if it is introduced under the skin, and that which it can exercise upon the ovule. In the latter case it gives life, it transmits physiological, as well as pathological, aptitudes, the kind of character of race and of individuality; this resemblance to the father is occasionally carried to such an extent, that it is even manifested in the sound of the voice. The impregnation of the ovule through the sperm is an absolutely special phenomenon, and can in no wise be compared to inoculation. How the sperm transmits the resemblance we do not know, but the fact is nevertheless absolutely proven. Fecundation and inoculation cannot be placed parallel to each other; the sperm may not be inoculable and yet it may transmit syphilis to the ovule. There remain none of the arguments, which we had analyzed, and which support the non-transmissibility of paternal syphilis, in force; and what is more, the doctrine which we are combating is also overturned by numerous witnesses of absolute reliability, and the doctrine of paternal hereditary syphilis rests upon a considerable number of observations.

In the first place, we have often seen syphilitic offspring from a syphilitic father and a healthy mother. Of late years I have collected a hundred odd of these cases, some being taken from Ricord, Trousseau, Diday, Hutchinson and other eminent men in the profession; I myself have had a certain number, and you will find all these observations united in the thesis of one of my students, Dr. Riocreux.

I will cite a few examples: A few days ago I examined a family who have had two children, of which the second child only was living, and which presented manifest symptoms of hereditary syphilis; the mother was healthy and the father had syphilis two years before the marriage. A young man got syphilis and was not treated. He married and there were five pregnancies; three times the pregnancies terminated in abortion of syphilitic children, and two children were born at term, but both had syphilis. Notwithstanding the most minute and frequently repeated examination of the mother, no signs of the disease could be found on her.

In one of Hutchinson's cases, a syphilitic physician married; his wife, not becoming infected by the disease, passed through eleven pregnancies, which ended as follows: two children were still born, two born alive, but afflicted with syphilis, died shortly after birth; seven children lived, of which three are syphilitic; the mother all this time remained free from the disease.

Four pregnancies are produced successively in a young household; three terminate in abortion, the fourth by the birth of a syphilitic child, which infects the nurse; the father has contracted syphilis one year previous to his marriage; the mother, who has been under my personal surveillance, has always remained healthy.

A last case: A healthy woman, whose husband is syphilitic, has eleven pregnancies. The first seven are terminated by abortion, the last four by the birth of syphilitic children.

These observations seem to demonstrate that the father can transmit syphilis to the child. Nevertheless, objections have been raised on this score: it has been claimed that the mother was not sufficiently examined. I admit, that it is possible to be deceived once, twice, or

even ten times, but it seems to me impossible to admit that an experienced physician can be constantly led into error. To make objections of this kind to experienced men like Ricord, Hutchinson and others, who have collected the observations which I quoted, seems hardly fair. The syphilitic taint in these cases has been searched for attentively and with the desire to find it; and if it was not found, it was because it did not exist.

Another proof of hereditary syphilis of paternal origin is the frequency of abortions in families where the father is syphilitic. The production of abortion, terminating a series of pregnancies under the influence of this cause, is a fact to be met with in every-day life.

A syphilitic young man marries a healthy young girl; four pregnancies; four abortions. In another case there were six pregnancies and as many abortions.

I have tried to find the frequency of abortions if the wife is healthy and the husband syphilitic. The following is the result of 103 pregnancies under these conditions: Forty-one abortions in 103 pregnancies will give us a percentage of 39; that is to say that in a family in which the husband alone is syphilitic the chances of abortions are 39 in a hundred. These calculations are based upon cases taken from the middle classes, where fatigue from overwork is as rare as fatigue from debauchery; the percentage would be undoubtedly increased if the cases were taken from the lower classes, and especially where there is at the same time some uterine affection.

The comparison of the termination of pregnancies in families in which the husband is infected with syphilis, after several healthy children are born, is instructive.

A healthy man (one of my own patients) marries a healthy woman; four pregnancies are terminated by the birth of four healthy children at term. Soon after the birth of the youngest child, the husband contracts syphilis. Three subsequent pregnancies end in abortion and the fourth in the birth of a syphilitic child. Thus, four healthy children before the syhpilis of the father; three abortions and one syphilitic child after its contraction.

We can, after becoming familiar with the foregoing facts, regard the frequency of abortions, if the father is syphilitic, as a demonstrative argument in favor of hereditary syphilis of paternal origin.

Finally, one more proof is furnished by the result of treatment in these cases; the series of abortions are interrupted if the appropriate treatment is applied to the father. I will cite one case out of 100 of my own practice: While yet a young doctor, I met one of my college chums, who complained to me that his wife had aborted in four pregnancies in succession; he attributed these abortions to the sickly constitution of his young wife. I reminded him of the fact that while at college he had had a chancre, followed by secondary symptoms, and hinted to him that the fault might lie with himself, and at the same time recommended that he himself be treated. He followed my advice and the result was that after treatment of fifteen months, four subsequent pregnancies were terminated by the birth at term of three healthy girls and one healthy boy.

Four pregnancies before treatment of the father terminated in abortions, and four after his treatment in the birth of healthy children at term. This is a common, every day result, of which I could cite many other examples, from which we can conclude that the paternal affection was the cause of the abortions.

Syphilis by conception furnishes me a final argument in favor of my position. We know that the mother can be infected by the child she carries; but this is a decapitated syphilis, without chancre, without primary glandular indurations or enlargements, and of which the first symptoms are those of the secondary stage. In these cases the father is syphilitic, the child was infected by him without the mother being diseased, and the latter is infected secondarily.

How can these facts be explained? We do not know. But it is evident that the child can only be infected with syphilis by its father, because the mother was healthy at the moment of fecundation. The syphilis by conception is thus another argument in favor of paternal heredity.

To resume: Four lines of arguments are in favor of paternal hereditary syphilis:

1. The proofs drawn from clinical observations.
2. The extreme frequency of abortions, if the father is syphilitic.
3. The possibility of arresting the abortions by the appropriate treatment of the father.
4. Syphilis by conception.

The study of these arguments permits us to assert that hereditary syphilis of paternal origin is a clinically incontestable truth.

Nevertheless some eminent physicians, Cullerier, for example, have denied these facts, which we regard as proof positive, and it is necessavy for us to seek the causes of this error.

These causes are of two kinds and forms, in reality two chapters in the history of paternal syphilis.

It has been said above that heredity does not exist in all the cases, in which it might enter into action, that there exists a great number of negative facts, and that very often a syphilitic father does not produce a syphilitic offspring. This is perfectly true, and it is evident that many fathers afflicted with the disease have healthy children; these observations are very common, and I have been able to collect 87 in a few years. But let us see: Are these healthy children born only when the father is cured? Not at all, and men under the full sway of syphilis can have sound children. Observations are numerous where fathers have healthy children and show signs of tertiary syphilis shortly after their birth. One of my patients, whom I treat for syphilis, is married and the father of six children, whose mother remained perfectly healthy. After the birth of the third child, he had a tuberculous syphilide of the thorax; after the birth of the fifth, a gumma of the palate. This is not all; men can have vigorous children after

they are in the full secondary period, and Cullerier has cited facts, which would be found improbable, if they were collected by any one else.

A young man marries six months after having contracted syphilis, against the counsel of his physician; he has intense secondary symptoms; his wife conceived and gave birth to a healthy child at term, which ten years later had not shown any suspicious signs.

A man æt. 25 years had a chancre, which healed without treatment; secondary somptoms appeared and he was treated for a little less than one month when he married; his wife became pregnant soon after and nine months later had a vigorous child, which was watched for eight years without showing any manifestations of the disease.

I will quote another case, which is from the practice of Maurice Reynaud. A married man is infected with syphilis and abstains from sexual intercourse with his wife for several months; one day, while in the full secondary state, presenting mucous patches, he forgets himself; a healthy child, which remains sound, is born nine months after.

If such cases were not substantiated by such eminent names, they would be discredited.

The inference from these facts is that hereditary syphilis is not transmitted in every case in which it might enter into action. Why? We do not know.

A second, very serious fact, which contributes to explain the error of those who have denied the hereditary syphilis of paternal origin, is the following: The paternal heredity is less often betrayed by purely syphilitic symptoms than by indications of another order, which are not attributed to the diathesis. Children of a syphilitic father, who are syphilitic themselves, constitute the exception.

Most often the disease is disclosed by abortions, premature labor, by infantile cachexia, congenital debility, consumption without cause, cerebral symptoms or convulsions. These facts are very frequent and we can regard them as constituting the rule.

I have collected 103 cases of pregnancies of families, where the father was syphilitic and the mother remained healthy. They have given the following figures: 19 syphilitic children, 41 abortions, 43 cases of death shortly after birth. In percentage this will give 18% of syphilis and 81% of deaths.

Deductions from a few cases among these might be made, where the mother could abort without syphilis and the baby die of infantile debility outside of parental influence. But one great point remains; that is: The paternal transmission is more often betrayed by the death of the child than by syphilitic symptoms. Paternal syphilis kills the child oftener than it transmits syphilis to it; what is transmitted is the inaptitude for living.

Thus, the error of those physicians who deny infantile syphilis due to the father is caused by the following two reasons: That syphilis is not transmitted in every case where the father is syphilitic, and hereditary syphilis of paternal origin is seldom betrayed by the birth of syphilitic children.

It was of the greatest importance to refute this error, which is pernicious to the children and to the mothers; harmful to the children in the way explained above, harmful to the mothers because it will expose them to syphilis by conception, which is the daughter of paternal hereditary syphilis.

A syphilitic father is a danger to his child directly, to his wife, through the medium of his child, indirectly.

Paternal heredity is less dangerous than maternal herdity or that from both, but the innocuousness is well compensated for by the frequency of the cases in which it can be determined. It is the most common, as out of 500 families afflicted with syphilis, only 13 women were diseased and 487 men. The cases where both parents are syphilitic are less numerous.

Thus, even if less injurious in itself, hereditary syphilis of the father is the most to be dreaded, because of its frequency.

The Case of Inoculated Leprosy.—At the recent Dermatological Congress at Prague, Dr. Arning of Hamburg gave an account of the notorious case of inoculated leprosy which he had supervised when in the Sandwich Islands (*Wiener Med. Woch.*, No. 29). Dr. Arning, in 1884, was permitted to inoculate a condemned criminal, with the latter's consent. Up to that time he says that the results of inoculation had been negative (e. g., twenty recorded by one observer, ten by another.) The man whom he inoculated had no inherited taint. The virus was introduced by "suturing" a piece of affected skin onto that of the subject, and also by punctures, etc., in various parts of the body, the giver being a girl nine years old who had pased through a severe febrile period and was suffering from tubercular leprosy. The immediate result was negative, but four weeks following the inoculation the man was attacked with an affection resembling an apyrexial subacute rheumatism. The first joint involved was the left elbow, the left arm having been selected as the site for the transplantation of a portion of leprous skin; and then other joints became attacked, the attack lasting for four months. Then occurred some characteristic swelling of the left ulnar and median nerves, which subsided in the course of six months. Meanwhile there had developed on the keloid-like scar of the inoculation site a typical leprosy nodule; from which abundant bacilli were obtained. Since Dr. Arning has returned to Europe he has learned that the disease has made marked progress (the drawings of the man's condition had been unfortunately lost, probably owing to the changes which had lately taken place in the staff of the prison and infirmary), and the unfortunate man was now in a condition of marked marasmus. Dr. Arning remarked that the case was not absolutely conclusive of the communicability of leprosy, since the man by birth and residence might have been predisposed to the disease.—*Lancet.*

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BRANSFORD LEWIS, M.D.,

EDITOR.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, AUGUST 24, 1889.

A VISIT TO MR. TAIT.

Dr. J. Milne Chapman, in *Med. Rec.*, August 10, describes in a most interesting manner a visit which he made to the great English laparotomist. Being a Scotchman, he was accorded a reception which few have been able to obtain of late. He was invited to witness operations both in the hospital and in private dwellings.

His account of the manner in which Tait operates is most engaging.

Together with four pupils, Dr. Chapman was ushered into the small operating room, where lay the patient already under the anesthetic, administered by a Sister. Mr. Tait, in his shirt sleeves and with a small knife between his lips, stood by the patient's side. No greetings were interchanged. One pupil quickly washed his hands and took a position opposite the operator, a position of minor importance, by the way, as Mr. Tait does about everything himself. "Never in all my experience," says the writer, "have I seen any one make a knife cut like he does. The instrument is a narrow-bladed, short scalpel, and he lays it down so that the whole length of the blade cuts. The effect is like cutting butter with a good table.knife. You hardly notice any motion, but the tissues separate in front of the knife and the incision is made, clean down, in many instances, to the peritoneum. One or two touches at most make the wound even from end to end, and then he picks up the peritoneum in two pairs of pressure forceps and cuts straight down between them, the assistant meanwhile holding one of the two pairs; these are then removed, he runs his knife up and down the peritoneum and the abdomen is open, actually in a shorter time than it has taken me to read this description, and with a neatness and dexterity which I fear no words of mine can fully convey. Mr. Tait rapidly enlarged the incision up and down by putting the tissues on a strain with two fingers in the abdomen and running his knife inside the abdomen, edge upward, the whole wall splitting apparently with as much ease as the leaves of a book before a good paper cutter. He inserted his hand behind the tumor and worked about for a time. As there was nothing to see of the operation by this time I turned my attention on the operator's face. It is a curious face, as those who have seen it will readily admit, long and large-featured in every respect, except the mouth, which is unusually small, with thin, firmly compressed lips. A heavy band of hair—which is long and black and glossy—hung down over the forehead and eye, but what then impressed me was the rigid concentrated attention expressed on every line and feature. The eyes were turned upward to the corner of the window, but were very evidently looking at nothing. Presently he said "Trocar," and a long curved one being handed to him, he took it in his right hand and pulled the point back till it was within the cannula, and slipped the instrument down in front of the left hand, which was still within the abdomen. Having settled its position, he held it secure with his fingers on the cannula shield, and having with the thumb slid the trocar forward, he pushed the instrument still deeper, and on withdrawing the trocar, there gushed out about a pint of thick offensive pus. He then said that there was the same condition on the other side and asked for the aspirator, but meanwhile continued to work away at the sac from which the pus had come, and presently brought it to the surface, a hugely dilated Fallopian tube of the right side. He tied the pedicle in the Staffordshire knot and removed it. He then went to work on the other side, but the sac burst, and he simply squeezed the pus out, fished the sac to the surface, and ligatured straight away. He then brought a third mass up from behind the uterus—oval and as large as a breakfast roll, which turned out to be a dermoid cyst of the right ovary. The pedicle of this was secured in the same way. At the time he gave this third mass not a moment's consideration, but laid it aside, proceeding to wash out the abdomen, using three large pailfuls—about the size of stable buckets—of warm water, running through an ovariotomy tube and trocar. During the process of washing out he moved the contents of the pelvis and the intestines freely about with the left hand to secure their being thoroughly cleansed. Looking at the uterus, he determined that it contained a fibroma, and impressed by the amount of mess that was about, he resolved at once to remove it. As his method of doing this is fully detailed in his writings, I shall not enter into a discussion of the process; suffice it to say that the neatness and dexterity he displayed forced the conviction on me that I was witnessing the performance of a real professor of the surgical art, and thrilled me with a sensation which a lover of music, who has never heard other than second or third-rate performances would feel, were he suddenly to hear the strains of a Paganini."

The strictness with which Mr. Tait enforces the most exacting attention to each and all of the details of his method was well illustrated at another operation which Dr. Chapman witnessed. Mr. Tait spoke only once during the operation; that was when the Sister who was giving the anesthetic put out her hand to lift one of the patient's arms on the table. Tait tapped her on the shoulder and said "attend to your own business."

A simple ovariotomy was finished in five minutes.

A curious procedure is related thus: "One thing I saw Mr. Tait do which I certainly have no intention of imitating him in. He used two of the fingers of his left hand as a sort of Sim's speculum, and, kneeling by the bedside with the window facing him—the field of operation, therefore, completely in the dark—he freely curetted the uterus without in any way fixing it. He then inserted a short Ferguson speculum, and through this passed into the uterus a thermo-cautery. No doubt the cervix had been previously fully dilated, and probably the end in view was satisfactorily accomplished, but I hardly think the somewhat free and easy method I have described will commend itself to the profession at large."

Mr. Tait has been assailed on all sides because of his peculiar views (which are rapidly becoming *less* peculiar as time rolls on and experience accumulates) on the subject of exploratory laparotomy. As far back as 1876 he wrote: "I have long since thrown the uncertainty of diagnosis, as an impediment to the adoption of proper treatment, to the winds, and when I find my patient in danger of death from conditions within the abdomen which do not seem to be clearly of a malignant character, but a correct diagnosis of which is impossible, I open the abdomen and at once make the diagnosis certain and successful treatment possible."

Extended practical application of this belief has only served to strengthen his reliance on it.

As to the charge so frequently laid against Tait, that he does not always confine himself to the truth in his reports and writings, this Dr. Chapman does not for a moment countenance. He declares that it is utterly impossible for Mr. Tait to tell untruths regarding his operations or his results. Of the four pupils who watch every operation, each keeps an accurate note book for his own reference and use, in which he details everything that happens both in Mozart's Hospital and private work. This has gone on for years; the results are published down to February 2, of this year, yet they have never been questioned by any of those who, had there been occasion and justification, could have done so successfully. Not one of his pupils doubts a word he has ever said. They have seen what others have not seen. They have had personal opportunities for detecting any such tendency to perversion of the truth, but one and all they express their unbounded admiration for the man and for the surgeon.

The Mississippi Valley Medical Association.

We learn from the secretary of this association, Dr. R. L. Thompson, late editor of the Review, that at no time in the history of this organization have the indications been so promising for a grand meeting as they are at present. The correspondence indicates that at least five hundred physicians will be in attendance. The American Medical Association this year was so far in the East that many practitioners from the West would have attended had it not been for the long distance and lack of reduced railroad rates. These will attend the meeting at Evansville, Ind., September 10, 11 and 12. Many of the most active workers in the M. V. M. A. are, and have always been, staunch supporters of the A. M. A.

The Chairman of the committee of arrangements of the M. V. M. A. writes us that he has secured a reduced rate of fare for attending members. The readers of the Review are advised to take a receipt (in addition to ticket) for full fare to Evansville, and this receipt will entitle the holder to a return ticket at one third fare. The fare from St. Louis is five dollars; by getting the receipt referred to, the return ticket will cost one dollar and sixty-six cents.

The titles of so many papers have been received that it is probable the convention will provide separate sections for medical and surgical topics. The committee will arrange for every paper to be read, and full discussion of each will be invited.

From 9 a. m. to 1 p. m., and from 3 to 5 p. m., will be devoted to scientific work—each evening will be given to pleasure.

The following are some of the papers to be read:

G. Frank Lydston, M. D., Chicago, Ill.—"Apparent Cancerous Transformation of Syphiloma of the Tongue."

W. H. Wathen, M. D., Louisville, Ky.—"The Results of Gonorrhea in women."

Rufus B. Hall, M. D., Cincinnati, O.—"Abdominal Sections (cases) with Remarks."

H. C. Dalton, M. D., St. Louis, Mo.—"Fractures of the Skull."

Geo. Halley, M. D., Kansas City, Mo.—"Vaginal Hysterectomy."

Bransford Lewis, M. D., St. Louis, Mo.—"The Rational Treatment of Gonorrhea."

G. M. Lowe, M. D., Cambridge City, Ind.—"Penetrating Wounds of the Abdomen."

J. K. Bauduy, M. D., St. Louis, Mo.—"Automatic Cerebration as Related to Cerebral Localization."

Wm. Porter, M. D., St. Louis, Mo., Chairman Committee to Report on "The Contagiousness of Phthisis."

G. M. McCaskey, M. D., Ft. Wayne, Ind.—"Pathology of Epilepsy. Drs. Bauduy, Fry and Shaw to Discuss."

W. O. Roberts, M. D., Louisville, Ky.—"Neurectomy in Facial Neuralgia Cases."

J. M. Mathews, M. D., Louisville, Ky.—"A Simple Method of Treating Fistula in Ano."

Arch. Dixon, M. D., Henderson, Ky.—"Chemical Use of Iodoform vs. Laboratory Experiments."

B. Merrill Ricketts, M. D., Cincinnati, O.—"Plastocosmetic Surgery of the Face."

W. C. Chapman, Toledo, O.—"Prog osis in Pulmon ary Diseases."

S. E. Munford, M. D., Princetown, Ind.—"Perineorrhaphy—the Immediate Operation."

Dr. A. M. Carpenter, St. Louis, Mo.—"This Wretch of a Stomach."

Wm. N. Wishard, M. D., Indianapolis, Ind.—"Formation of Artificial Urinary Canals—Illustrative Cases."

E. A. Wood, M. D., Pittsburg, Pa.—"Invalid Nursing Subjectively Considered."

A. N. Williams, M. D., Hot Springs, Ark.—"Circumcision."

E. Fletcher Ingalls, M. D., Chicago, Ill.—"Chronic Tonsillitis."

Wm. B. Fletcher, M. D., Indianapolis, Ind.—"Brain Tumors."

C. G. Comegys, M. D., Cincinnati, O.—"Fevers and Their Treatment."

E. R. Lewis, M. D., Indianapolis, Ind.—"The Cautery vs. Snare in Nasal Hypertrophies."

A. B. Shaw, M. D., St. Louis, Mo.—"Results of the Suspension Treatment in Affections of the Spinal Cord with Demonstrations of the Technique."

A. H. Ohmann-Dumesnil, M. D., St. Louis, Mo.—"1. Kraurosis Vulva; 2. Dermatitis Tuberosa of Bromic Origin."

The physicians of the Mississippi Valley are engaged in treating the same class of cases and the exchange of views will be conducive to the good of all. No better time will present itself to us to come together than the month of September. It does a man good to get away from home occasionally, and see what his fellow workers are doing. We would advance but slowly if we had only our own experience to guide us.

The local profession of Evansville will entertain the visiting members quite royally. On Tuesday evening, September 10, a reception will be given, with music, dancing and refreshments; on Wednesday evening, a promenade concert; and for Thursday afternoon an ex cursion has been planned.

Does the Practice of Medicine Harden the Heart of the Physician?

This question has so often been answered in the affirmative that it gives one who is in the ranks gratification to read of such a marked refutation of the charge as the one given, in the *Med. News*, by Dr. Forbes, of Philadelphia. Hard-heartedness is nothing more nor less than deep-rooted selfishness. Among physicians. as among every other class of men, persons are to be found who possess this quality in a high degree; but the practice of medicine is in no way calculated to develop it. A good physician is schooled to meet emergencies, and his deliberate manner, when all those around him are giving pronounced expression of their feelings, has often been mistaken for hardness of heart. Under such circumstances the doctor often has a stimulus that none of the others have—his knowledge of the course that is able to relieve the suffering and lighten the distress of those around him. He is the hero of such occasions and the realization of his responsibility urges him to do his duty in controlling those around him.

Dr. Forbes states that during the Johnstown disaster more than one-fourth of the entire number of physicians of the place lost their lives in trying to rescue others; and many of those who survived were conspicuous in their efforts to render aid to other sufferers from the flood.

The Black Death of the Fourteenth Century.

An interesting account is given in the *Brit. Med. Jour.* of June 29 of the researches of "Dr. Jessop, the well-known antiquarian rector of Scarning," who undertook to discover what the fatal disease known as black death was. From the records of the ancient diocese of Norwich he learned that the almost incredible mortality that has been reported as occurring during the prevalence of the disease was founded on fact. In Little Cornard, a manor in that diocese, the number of families did not exceed fifty; the records show that of these, twenty-one were completely annihilated, men, women and children, and many deaths must have occurred in the other houses.

After recounting the evidence that he has gathered, Dr. Jessop says: "When I consider all this and a great deal more that might be dwelt upon, I see but one conclusion that can be arrived at, namely, that during the year ending March, 1350, more than half the population of East Anglia was swept away by the black death. If any one should suggest that many more than half died, I should not be disposed to quarrel with him.

The journal says: "What was the nature of that disease which under the name of the 'black death' swept with unexampled ferocity through the known world in the fourteenth century, and what was the mortality it caused, have long been vexed questions for both physicians and historians.

There has been no epidemic since mythical times to which so many results, both social and political, have been attributed by subsequent writers. The desolation it produced was so great that cotemporary chroniclers resort to the most sweeping statistics to express its universal fatality. In Basle 14,000 of the population died; in Venice three-quarters of the total inhabitants; in Flor ence 60,000 people; in Sienna 70,000, while in the rest of Italy but half the original population survived the epidemic. Even in Germany, where the incidence of the disease was less awful, it is said to have caused more than a million deaths. In England the statements

exceed the credible, since we are told nine-tenths of its inhabitants were swept away."

It is quite probable that the disease was one that is known to us at the present time, and that the high death rate was due to the malignant type of the disease and to the unsanitary conditions under which the people lived. We have "black measles," "black small-pox," and "black vomit" in yellow fever and other diseases. Every one knows that epidemics of the same disease vary greatly as to the prevalence of certain symptoms, and also as to the attending death rate, but it is yet to be proven that any disease has been obliterated from the earth.

A Thing Impossible.

Dr. Lycett read a paper before the Staffordshire Branch of the British Medical Association, in which he stated that every practitioner ought to be familiar with the details of opening the abdomen and be provided with the essentials for such an operation.

A man cannot become properly acquainted with the details of removing tumors from the abdominal cavity without doing two or three such operations himself under the direction of some one who has learned the art. The great majority of practitioners would only have two or three such operations in a life time, so when they had "learnt how", they would have nothing to do. If every practitioner throughout the country should attempt to prepare himself by reading books and buying instruments and upon this knowledge proceed to remove tumors from the abdominal cavity when occasion presents itself, the mortality would likely astonish Dr. Lycett.

No, the grand success of Lawson Tait, and other great surgeons is not enough to justify the profession in relegating abdominal surgery to the realm of minor surgery.

Dr. Lycett shows the folly of his own advice when he says: "The wide range of professional knowledge expected from the all around practitioner necessarily places him at a disadvantage, as the mind of man, though capacious, cannot embrace the present collective information made known by individual work." In other words, the specialist gives the patient a better chance for recovery than the general practitioner can possibly do. But the general practitioner can treat constitutional diseases better than the specialist who devotes all his time to local diseases.

MEDICAL ITEMS.

A New Departure.—Dr. Kerr, of Rockford, Ill., has gone to Europe to study the treatment of hydrophobia.

The Nickle In-The-Slot.—This rage has extended so that it now embraces the dispensing of ice-water in the Eastern cities. The usefulness of this application of the custom at least will probably be limited to those who overlook the danger of promiscuous drinking from public cups.

Reduction in the Price of Sulfonal.—The price of sulfonal has lately been reduced from $2.00 to $1.35 an ounce. So much for the power of the press.

Death from Sulfonal.—A death from this drug has recently been chronicled. Many instances of its depressing and otherwise troublesome effects have been reported.

Worth Appreciated.—Cairo, Ill., has erected a handsome monument to the memory of Dr. Roswell Waldo, at Mound City, in recognition of his services in the yellow fever epidemic in 1878.

New Surgical Instruments at the Exposition.—*Le Progres Medical* is publishing a very interesting series of illustrations of the newer surgical instruments now on exhibition at the Paris Exposition.

A Convenient Disinfectant.—Take:

Paraffin, - - - -	9½ parts.
Iodine, - - - - -	1 part.
Salicylic acid, - - -	2 parts.

This mixture made into pastilles produces iodine and carbolic acid when burnt, and will both deodorize and disinfect the sick room.

A Library Three Thousand Five Hundred Years Old.—Certain discoveries lately made at the site of Babylonia, show that fifteen centuries before our era, there was an active literary intercourse going on throughout the civilized world of Western Asia, chiefly by means of the Babylonian language and script. Great libraries were collected, formed of clay tablets, with cuneiform inscriptions.

Comprehensive Specialism.—A physician in an Iowa town, who is given to advertising, has on one of his display cards, printed on the same sheet with the butchers, soap makers, and confectioners, the following: "Practice limited (except among former patrons) to Surgery, Diseases of Women, Diseases of Respiratory, Alimentary, and Genito-urinary Organs. The Eye, Ear, and Skin. A general Office and Consultation Practice."

Another Local Anesthetic.—Since the advent of cocaine, it has become quite the fashion to discover local anesthetics. The latest is one which was introduced to the members of the Berlin Medical Society recently. Hayap is its name, and it seems to have considerable power. An aqueous solution distilled into the eye of an animal brought about complete anesthesia which endured in various instances from ten to twenty-four hours.

Texas Fever in St. Louis.—A note in the last number of the Review referred to a rumor that Texas fever was suspected by a veterinary surgeon as being the cause of the death of some valuable milk-cows in the city. Since then the probability of this being a fact has become quite strong, and a request has been made for Dr. Paul Paquin, State Veterinary Surgeon, to make an investigation.

This is certainly something of the greatest importance, which should receive official attention at the earliest moment. It is reported that Dr. Paquin has discovered a method of preventing the spread of the disease by inoculation; if this be so, now is the time to test its value.

The Danger of Spreading Disease by the Elixir Vitæ.—Dr. A. B. Shaw has sounded a timely note of alarm (see last number of Review) by calling attention to the great risk of inoculating tubercle bacilli, involved in the injection method. It is unfortunate for the method and its ultimate success—if there *is* anything in it—that the whole subject has assumed the aspect of a popular furor. Many and serious—perhaps fatal—blunders are sure to be evolved as a consequence and will react in condemnation of the method. It is well known that sheep are very prone to tuberculosis, and it is also a fact that, for expediency, they are the very animals most likely to be drawn on for the supply of elixir. And how many physicians will be liable to prepare and examine the material before using it? How many will be able to recognize bacilli when they are contained in the material? Our advice in this matter is: Go slow; investigate carefully but, *investigate.*

Pregnancy of Thirty-Three Years Duration.—M. Tarnier presented to l'Academie de Medecine, Paris, a woman, the subject of extra uterine pregnancy, the history of which was as follows: In 1856, becoming pregnant, the patient consulted M. Loraine, who diagnosed extra-uterine pregnancy. Nothing was done, however, and the pregnancy went on to term. At that time the symptoms of labor manifested themselves, but suddenly they ceased, following the death of the fe tus, the movements of which, until then, had been very active. At the same time the active pains which the mother had experienced for some time disappeared at once and completely. All quieted down, and the patient conserved her fetal cyst without being otherwise in commoded.

Three years afterward she consulted Nelaton who advised abstention from sexual congress. Tarnier, who had lost sight of her since the *accouchment* alluded to, again saw her, when she appeared to be in good health, save a diabetic tendency, which had nothing to do with the abnormal pregnancy. Her cyst did not cause much annoyance and showed itself in the form of a sub-umbilical tumor, of almost ligneous consistency, resistant, and composed of two parts, in which was easily recognizable the head and the trunk of the fetus. The head presented itself as a rounded tumor placed to the right; the trunk, separated from the head by a considerable depression, which seemed to indicate a luxation of the cervical vertebræ, was easily recognizable. The bi acromial diameter (11 cm.) was also appreciable.

Apropos of the Next Pharmacopeia.—In May of next year the convention of properly accredited representatives of the government and all incorporated medical and pharmaceutical bodies, colleges and associations, will meet at Washington to make arrangements for the revision and publication of the 1890 U. S. Pharmacopeia.

The question of changing to a certain extent the plans of its preparation is now under discussion, and it is expected and desired that the views of all interested parties be presented in the mean time.

Heretofore, many earnest, energetic and highly competent workers have given their aid to the compilation, examination, and other details of the work, without adequate compensation for time and even for expenses incurred, and the more willing these co-laborers have been to make sacrifices, the more onerous have been their labors. And when the work was finished, with no funds in the hands of the organized committee and no provision for the expenses of publication, the valuable copyright has passed to outside publishers who reaped the profits.

A strong movement is now to be made to change this state of affairs. It is proposed to make the Committee of Revision a legally organized corporation, to occupy permanent quarters, to publish the Pharmacopeia and hold its own copyright, and from the profits of the sales of the book to build a laboratory where the work of the colaborators in the revision in future years may perform the work of chemical and pharmaceutical examination and verification of formulas.

In a matter of such importance, where national pride and reputation are concerned, it behooves all physicians and pharmacists to show an active interest, and in helping elect representatives for the convention in May, where this plan will be discussed and finally accepted or defeated, to send independent, unbiased delegates who will weigh carefully the arguments pro and con, and decide for the course which promises best results for the future.

FROM THE GERMAN.

By Dr. W. C. Mardorf, St. Louis.

Statistics as to Dreams and Sleep.

F. Heerwaygen (*Wundt's Philos. Stud.*) sent out 500 interrogatory circulars concerning sleep and dreams, and received 406 replies, with, in most cases, clear and precise answers. Of these, 142 were from females, 151 from students (male), and 113 from males other than

students. From these answers were drawn the following facts: The liveliness of dreams increases with their frequency; they are more animated with students than with other men; most so with women; also, the more frequent the dreams are, the lighter the sleep will be.

People who dream frequently and whose sleep is light are able to remember their dreams better than those whose slumber is sound and who dream but little.

Seventy-three per cent of the females dream nightly and frequently, against 50% of the students, and 48% of the remaining males.

On an average, women sleep much more lightly than men, and dream much more frequently. In childhood the number of dreams is but small, increasing rapidly with years, however, reaching its maximum at the age of from twenty to twenty-five years, after which there is a decline in frequency. Slumber is soundest in childhood, and gradually becomes less so with increasing years. In men the frequency of dreams and the depth of slumber seem to have no influence whatever upon the duration of the latter; quite different is it with women.

Those women who dream frequently, sleep an hour longer than those who dream but seldom; those whose slumber is light, sleep an hour less than those who sleep soundly. The necessity of sleep is greater in women then in man.

The time required for falling to sleep is on an average longer with frequent dreams and light sleep than where dreams are few and slumber is profound. People who sleep soundly or who do not dream often are better disposed in the first half of the day than those who slumber lightly or who dream often; the majority of those possessing a sluggish, phlegmatic disposition may be found in the first group, while most of the active, nervous temperaments are included in the second group. (Among the eighteen noted down as very nervous persons, but one dreamt seldom, and only two slept soundly). The fact that in the author's statistics light sleep is accompanied by frequent dreams throughout, is explained by him in the following manner: As there is in deep sleep a loss of sensibility to external irritations, so there is also an obtunding of the sensibilities to impressions coming from within.—*Deutsch. Med. Zeit.*

The Diagnosis and Operation for Pyloric Stenosis.

Dr. Angerer, of Munich (*Deutsch. Med. Zeit.*), says: In the past few years the author has operated upon the pylorus sixteen times. In order to be positive that a tumor is one of the stomach or not he makes use of the maneuver mentioned in the Review not long since; he distends the stomach with carbolic acid gas, or air introduced by means of an esophageal tube. When the stomach is well distended its outlines become quite distinct, and one can often obtain a very accurate idea of the position and dimensions of the tumor; this is not enough for operative purposes, however, and the next question that presents itself is as to the freedom of the tumor from adhesions to the neighboring organs. A few data for answering this question may be obtained by marking out the contours of the stomach before and after distension and contrasting them. The movability of the pyloric tumor will also give some information as to the existence of adhesions. Ordinarily the pylorus may be moved from its normal position downward and to the right until it reaches the mammillary line. Deviations from this as a standard may afford some basis for conclusions as to the pathological conditions present. There may be adhesions to the posterior abdominal walls, to the liver, the diaphragm, or the pancreas. When Angerer ligated the pylorus on the cadaver and attached it to the pancreas, he found that there was no displacement on distending the stomach with gas. If the attachment to the pancreas was loose, the pylorus could be displaced to its full extent. A tumor which grows less apparent or disappears entirely when the stomach is distended arises in all probability from the posterior wall of the stomach, and such a point of origin speaks for adhesions of the tumor to organs lying posteriorly. Such a case was that of a woman æt. 30 years, who had been suffering with a gastric affection for two years, and presented herself to the author for treatment in May, 1888. On distending the stomach with gas the tumor which presented itself became smaller and at length disappeared altogether. An operation revealed very intimate adhesions to the pancreas. In another case on distending the stomach the tumor moved to the left, and at the operation it was found that the mesocolon was thickly beset with metastatic tumors.

According to these observations the typical resection of the pylorus can be undertaken with some prospect of a good result only when the pylorus is freely movable. Where the pylorus is not so freely movable as is normal, operative measures should be well debated, and when the pylorus is fixed the operation of extirpation cannot possibly be carried out. The author gives a word of caution about incontinence of the pylorus. If the stomach be filled with carbonic acid gas in such a case, the gas passes rapidly through the pylorus and distends the coils of intestines.

The first case operated upon was that of an army surgeant, æt. 43, who had been suffering with a stomach trouble for a long time. There was very little dilatation of the stomach. The tumor at the height of the umbilicus, was considerably adherent. On distending the stomach the phenomenon of incontinence of the pylorus was plainly noticeable. After making an exploratory incision the abdomen was closed again, as there was no stenosis and the growth was firmly adherent.

The author has resected the pylorus in the typical manner six times. One case, that of a women in whom there was stenosis caused by an extensive cicatrix, enjoys excellent health at the present time, more than two years after the operation. Two cases died three weeks after the operation, one of croupous pneumonia. The fourth succumbed to peritonitis, and the other two died

of shock. He has also performed six gastro-enterostomies; one lived six months, another six weeks, while the others did not survive the operation long, dying after a few days (cause of death not stated).

BOOK REVIEWS.

The Physiology of the Domestic Animals, a Text-Book for Veterinary and Medical Students and Practitioners. By Robert Meade Smith, A. M., M. D., Prof. of Comparative Physiology in the University of Pennsylvania; Fellow of the College of Physicians and Academy of the Natural Sciences, Philadelphia; of the American Physiological Society; of the American Society of Naturalists; Associe Etranger de la Societe Francaise d'Hygiene; etc. Pp. 1000; 400 Illustrations. 1889. Philadelphia ,F. A. Davis.

This admirable work of over 900 pages, 400 illustrations, and containing many quotations and engravings from such standard authors as Colin of France, Ellen berger and other Germans of medical standing, is just what veterinary and medical students, and students in stock-breeding and scientific agriculture have needed greatly. No other work of similar import on the same subject exists in the English language and I have often deplored this fact in my class room. Having been acquainted for a long time with Colin's great physiology, I have often felt the need, and desired a translation of it, or the publication of some equally valuable work.

Happily Prof. Meade Smith has done more in his well-illustrated and agreeably written book. He has put before the English-speaking people the knowledge and experience of the foreign countries the most advanced in the physiology of domestic animals, and has done it with clear descriptions and good illustrations, showing the processes of the most important and use ful physiological experiments, etc.

The work is in three parts. The first a brief but concise exposition of the physiology of animal cells, tissues and the development of organs.

The second part is devoted to special physiology of the various systems, excepting the apparatus of generation which is treated in the third and last part.

The second part constitutes the bulk of the work and contains the greatest amount of interesting and useful information.

The articles on vegetable foods, animal foods, organic foods and diet, are particularly interesting as they contain much which will be new to most readers. Digestion, with an accompanying table of the "Digestibility of Different Food-Stuffs" will be of very great assistance to those who have been or are compelled to study the processes of digestion of domestic animals from books or lectures on human physiology. I remember well that I, as many hundred students before me have done, speculated and reasoned with difficulty on the mechanism of digestion in various herbivorous animals largely from what I was taught concerning digestion in man.

The section referring to nutritive processes, "foods required by the herbivorous under different conditions" affords an abundance of food for reflection, not only for the scientific man, but for all who are more or less interested in the subject. There is something there that should give stock-feeders of all kinds a better understanding of their task and lead to better results financially.

One striking feature in the book is the illustrated physiology of movements, from the work of Colin. It shows the horse (and some other animals) in a variety of motions. Here is something for the lover of good horseflesh. Many useful hints are given to the mind of the reader and should benefit the amateur horseman.

There is enough of human physiology in the publication to make it attractive and useful to the physician and especially to the country practitioner who is so often consulted on subjects pertaining to veterinary physiology and pathology and to the teacher of physiology who cannot better illustrate his subjects than by drawing comparisons and points to experiments so much more common in veterinary physiology.

Altogether, Prof. Smith's "Physiology of the Domestic Animals" is a happy production and will be hailed with delight in both the human medical and veterinary medical worlds. It should find its place besides in all agricultural libraries.

Paul Paquin, M.D., V.S.,
State University of Missouri.

The Physician Himself, and Things that Concern His Reputation and Success. By D. W. Cathell, M. D. 1889. Pp. 298. Price $2 net. Philadelphia, F. A. Davis.

This valuable work has now reached its ninth edi tion, which alone is a certificate of the high regard in which it has ever been held by the thousands of medical men who have found in its pages the hints that have done much to shorten their road to success, to lighten their professional burdens and to take the edge off of cutting remarks and slights which are ever destined to fall to the lot of all of the younger members of the profession, and likewise to many of the older ones.

In this book suggestions are offered for solving the problems of a medical career which have proved, and will continue to prove, of invaluable service to beginners in medical practice.

The advice it gives is sound and always pertinent. Only he who has read it will appreciate the loss he would have sustained had he not done so.

To the young man just 'branching out' we would say, possess yourself of this book by all means; read and learn much that sad experience would otherwise teach you. To the old-timers, we would say, read it again, in this new revised and enlarged ninth edition.

CORRESPONDENCE.

A POSER.

ANGOLA, LA., Aug. 7th, 1889.

EDITOR WEEKLY MEDICAL REVIEW.—My patient, Mrs. R., æt. 24 years, quite stout and to all appearances in general good health, was taken on the morning of May 30, with a "stinging" pain in the region of the parotid gland on the left side of the face and around the left eye; it grew worse until near noon when I was sent for. On arriving at the house and examining the patient I found, as I thought, a distinct and typical case of facial paralysis.

The left side of the face was much swollen, painful and very red; the mouth was drawn to the opposite side. She was unable to close the left eye or pronounce distinctly any words beginning with the letters B or P. Electro muscular contractility was entirely lost. There was some slight disturbance of hearing with a partial loss of taste; though the salivary secretions were normal, tongue and skin clear, temperature normal, bowels regular.

I instituted a course of treatment under which she improved very rapidly for about two weeks, at the end of which time she went out on the damp ground, got her feet wet and as a natural consequence "took a very bad cold" and in a few days was in a worse condition than when I first saw her. Since that time I have tried almost everything in the whole list of materia medica, without obtaining the desired result. I have given internally iron, quinine, strychnine and arsenic both singly and combined; externally I have used alternately, the galvanic and faradic currents; blisters, leeches, hot fomentations, counter-irritations, shampooing and massage, and still I have not met with success.

The swelling of the face and tenderness on pressure, together with the conjunctival inflammation have entirely disappeared and electro-muscular contractility is partially restored, though the face is considerably drawn yet and the pain, which is now confined to the points of exit of the mental, the infra- and supra-orbital nerves is sometimes intense. Where is trouble? Is it within the cranium? Has there been a rupture of some blood-vessel or the formation of some tumor producing pressure upon the nerves? Is it within the aquæductus fallopii, or does it affect the chorda tympani (which would account for the perversion of taste), or is it peripheral, the result of a draft of cold air on the side of the face to which the patient was exposed (so I was informed) on the night of the attack. And whatever may be the cause, what is the cure? Yours fraternally,

WM. B. BURCKHALTER, M. D.

[We would suggest that in addition to systemic tonics, phenacetine, in five grain doses, or antipyrine in ten grain doses, be given three or four times a day—especially when there is pain. Local galvanism should be used until electro-excitability is established; it may then be substituted by faradism, one application each day. Intra muscular or subcutaneous injections of $^1/_{40}$ grain of strychnia twice a day will also be of great service, probably. We should like to hear from our readers on the subject.—ED. REVIEW.]

SOCIETY PROCEEDINGS.

PHILADELPHIA OBSTETRICAL SOCIETY.

[CONCLUDED FROM PAGE 140.]

Regular meeting Friday, June 7, 1889, the President, Dr. Theophilus Parvin, in the chair.

Dr. JOSEPH HOFFMAN.—There is one point in connection with the case of Dr. Shoemaker to which I would call attention, and that is the use of bichloride and the absence of odor. It seems to me that the absence of odor must have been due to the bichloride. The statement that there was no odor is perhaps a little too wide, inasmuch as disinfection was used persistently. It seems very evident that the case was one of general septicemia from the preceding dirt, and that the peritoneal condition was only an incident to the general systemic poisoning. I have seen one case die from general peritonitis in which there was pus, but in which the symptoms appeared only on the eighth day, the patient succumbing on the tenth day.

The PRESIDENT.—How do you explain the physometra?

Dr. GEO. E. SHOEMAKER.—I did not assert that there was physometra. I only asked if the escape of air from the uterus or vagina could have been so explained. If there was gas it was probably the result of decomposition. The was no peritonitis at any time. When I say that there was no odor to the lochia, I mean no abnormal odor, except at the time mentioned, when there were indications for disinfection.

I would like to call attention to one difficulty in the diagnosis of post-puerperal pelvic abscess. Over a year ago I had a bad case of septicemia in a woman who had been delivered by another gentlemen. She developed on the left side of the uterus a decided sense of resistance, and a tumor apparently the size of the fist, and tender on pressure. The temperature was 105°-106°, and there were profuse sweats at night. I felt very solicitous as to whether or not there was pus. The enlargements proved to be fecal mass, which purgatives removed in a few days. No operation was performed and to-day there is not a healthier woman in the city.

Dr. J. PRICE presented specimens with the following remarks:

I asked Dr. Penrose for a large fibroid with cystiform degeneration to present in connection with a large myoma. This case demonstrates a point from a pathological and from a therapeutic and electrical point of view. It was the clearest case for diagnosis that I ever saw. The woman was æt. 46 years, and the tumor ten

years in developing. Last year there was almost constant bleeding. There was rapid development, with faint fluctuation at points. It was one of those tumors of which Atlee gives five in his three hundred and seventy-eigh ovariotomies. It was generally adherent and the doctor tapped it to reduce its size, that he might deliver it through a smaller opening. He found between the uterine cavity and the cyst a membrane as thin as the amniotic membrane, with vessels as large as the finger. If in such a case any one had passed an instrument, he would probably have lost his patient on the table.

I have here a soft myoma, which is probably one-half the size that it was when removed. It extended high up to the diaphragm. It was not of rapid development. It is a true myoma—an edematous myoma. The patient was æt. 29 years. On the left side posteriorly I could feel bodies, independent of the tumor, which moved with the cervix. I was satisfied that it was a myoma, yet it did look like one of those ovarian tumors with solid contents, and these solid bodies posteriorly. On the right side is a small blood-cyst, perhaps the size of a hen's egg. The shrill and aneurismal noises on the right side posteriorly were very curious. On vaginal examination it was the most marked that I ever felt. When I came to operate I feared to pass the needle so deep, and ventured to shell this ovary out. The vessels were as large as the iliacs.

These two cases demonstrate to me the usefulness of electricity in many of these cases. It seems to me to be about as probable that we could act upon the primitive iliacs or aorta by electricity as that we could influence vessels the size of the finger in this tumor. The was an extra-peritoneal, supra-vaginal operation. The operation was qnite simple. I removed the tumor well down to the wire to prevent overlapping, and stitched the stump as is done by Bantock. The last operation was done on Tuesday. That of Dr. Penrose was done a month ago.

I have here a small ovarian cyst, which some would call an intra-ligamentary cyst. I have some doubts as to the nature of intra-ligamentary cysts. I look upon them as pelvis bound by adhesions. They have been tapped, and pelvic adhesions formed. In such cases I have had to begin at the incision with the knife, and sometimes finish with the knife. This tumor was covered with adhesions. It was on the left side, pressing upon the bowel, causing difficult and painful defecation. She had had attacks of pelvic inflammation. There is here a small blood cyst as large as a walnut. I dreaded to tap it, fearing that it contained that sebaceous, putty-like material of dermoids which is so difficult to remove. The patient has asked me to preserve the tumor, and she has bought a jar in which to place it.

I have here a doutful specimen. It may be an hematosalpinx or it may be a tubal pregnancy. It was removed by Dr. Penrose. There is no semblance of a pavilion.

Some time ago I had a case in which the placenta and clot was in the cornual extremity. When I removed it, a rose-shaped clot, as large as a good-sized rose, protruded from the pavilion extremity. Here the abdomen was filled with blood. This woman had had pain and had hemorrhage recurring from time to time.

The history in the case of Dr. Penrose just referred to was that the woman had been married four years but had never conceived. She was at the time living as a domestic. She was examined at the dispensary and sent to my office the same evening, the suspicion being that it was a case of extra-uterine pregnancy. There was a delayed period. She had had agonizing pains, which had recurred, and she had been in bed several days. I at once sent her to the hospital. There was constant vomiting for the next four days. Aside from this there were no alarming symptoms. The operation was postponed for four or five days, until the nausea entirely subsided. As matters stand now, the woman is reacting nicely, there is no nausea, and she is doing well. It is curious how we reason about these cases.

In regard to these fibroids, we are now guided largely by the size of the tumor and its character. In myoma the removal of the appendages is, in my opinion, simply useless at any period; and in these large fibroids with nodules and probable extension into the uterus, and where degenerative changes have taken place in the uterine wall, I believe that it is about useless.

In regard to extra-uterine pregnancy, I would call attention to two or three cases on record, and to the uselessness of electricity and to some points in diagnosis. Bantock recen ly removed a ruptured tubal pregnancy on one side and a pyosalpinx on the other. In that case it would have been impossible to make any refinements in diagnosis. Dr. Eddis exhibited to the British Gynecological Society specimens of recent operations. One was an ovarian cyst the size of a hen's egg, and above this the right Fallopian tube was enlarged about the size of a small walnut by an extra-uterine pregnancy. This had ruptured at the othor end. This case was a typical one, and illustrates very beautifully how common it is to find a mixed condition of affairs in the pelvis. Such has always been my experience. When we open the abdomen we do not know what we are going to fiud. We may not have the slightest suspicion of extra uterine piegnancy, and yet in many cases, as has been demonstrated in this town, find one.

It is common to find small blood cysts, and these small tumors contain peculiar little bodies. The small blood-cysts often look like extra-uterine cases, but many of them are not.

DISCUSSION.

Dr. William Goodell.—In regard to the treatment of the pedicle in simple hysterectomy, I have had within the last two years at least half a dozen cases, and in some the tumor was very large. One weighed over thirty pounds, another weighed forty six pounds, and the abdominal incision in this case was the longest I ever made. The pedicle was a little larger than my wrist. In these cases I ceased to use the extra-perito-

neal method, but have dropped all the pedicles, and all the women have recovered. I transfix the pedicle with a double ligature, and tie on either side provisionally. Then the tumor is cut away and the pedicle is scooped out so as to be funnel-shaped. Each ligature is now untied, its free ends wrapped around the handles of two forceps, as a purchase, and retied as tightly as possible. I then close up the cup shaped cavity by sewing the peritoneal edges together. In the last case I did this with the continuous silk suture. In one case I used cat gut, but in all the rest, silk. All the cases have recovered as promptly as after a simple ovariotomy. Unless the pedicle was of extraordinary size, I would in future resort to this method, for convalescence is far more prompt than with the extra-peritoneal method. In these cases I have not used the drainage tube unless there were adhesions. In the case of very large tumors, the adhesions were so formidable that the women came nigh dying on the table. In this case I used the drainage tube, but in most of them I did not.

Dr. Joseph Hoffman.—I thought that Dr Price would have referred to a case of my own in which there was extra-uterine pregnancy and pyosalpinx. The diagnosis could have been made had not the woman's condition been so critical that it was not necessary to go into any refinements.

In the case of fibroid tumor shown, the belly, previous to operation, was certainly as large as at a seven months' pregnancy. In reference to the blocking up of the intestines, I removed three weeks ago a tumor two-thirds the size of the one shown. The woman gave a history of a pain in the side ever since menstruation, and pain and trouble in defecation so great that they could only be explained by adhesions. The tumor was not large enough to make sufficient pressure to cause such trouble by its weight alone. She had suffered so long that I expected to find a dermoid cyst. The question to my mind was whether this had been developing for a long while, was still growing, or had grown so far and stopped.

I do not think that if Dr.Price had the experience that I have had in the last few days, he would give his specimens to patients. An attempt to blackmail me was made by a woman to whom I gave a specimen. She took it to another doctor, who encouraged the idea that nothing had been wrong, and that the operation was unjustifiable. This was one of the most severe cases that I ever attempted to deal with. The adhesions were so great that I had to use a drainage-tube for two weeks.

Dr. J. Price.—In regard to the treatment of the pedicle. At a discussion before the American Gynecological Society at New York, Dr. Bantock and Professor Martin had the opportunity to present the relative merits of the two methods of treatment, and I think that Dr. Bantock demonstrated to the satisfaction of the society that the extra-peritoneal method was the better one. We are inclined in all work to follow successful operators. I am glad to hear Dr. Goodell state that he has been so successful with the intra-peritoneal method —much more so than Professor Martin and others; Professor Martin's mortality from hysterectomy is still high. Dr. Bantock is down to 12%-14%. Mr. Tait has had a run of thirty-two supra-vaginal amputations without a death. Mr. Keith lost three in thirty-eight or forty. The three most successful operators in the world are Bantock, Keith and Tait. They are all three working with a mortality less than 14%. This is about as low as Meredith Thornton in ovariotomy. Many cases such as Dr. Goodell mentioned are quite tempting. In my case the pedicle was larger than the wrist. I screwed up the clamp five times, and each time I thought that it was quite tight. I have never lost a simple hysterectomy. I have lost two with cancer. In both the disease had invaded the bowel, and I do not see that it would have been any advantage to them to have gotten well.

In regard to drainage, that is still a disputed point. After dropping the pedicle, Professor Martin pushes a rubber tube up through the vaginal vault. While he does not improve the drainage from above, he does from below. Mr. Bantock drains largely where there are adhesions. For myself nothing would at present shake me in my views in regard to drainage. In my first series of one hundred cases, I drained in 46%; in the next, I drained in over 50%.

Dr. H. M. Weeks reported "A Case of Ovariotomy."

In October, 1888, a case for operation was placed in my charge. The history of the case was briefly as follows: Less than a year (about ten months, as near as the patient could remember) before I saw the patient, she was seized with a sharp pain in the right ovarian region. A physician was called, who diagnosed an acute attack of inflammation of the ovary. Anodynes were freely given, hypodermically and by the mouth, and a blister applied over the seat of pain. The pain still continuing, and the patient growing weak and losing flesh, the physician in attendance was dismissed and another called, who diagnosed an abscess, and treated the case for some time with anodynes, counter-irritation, and fomentation. Then was discovered a slight enlargement of the abdomen, which seemed to confirm the medical man in his opinion of an abscess being present, and he decided to await development, In the meantime the case passed into still other hands, and this time the physician, upon his first examination, found a tumor in the pelvis, which, however, he was never able afterwards to find. The pain gradually grew less, and, though the patient was weak and did not regain her flesh nor her usual health, she resumed her household duties, noticing more and more the enlargement of her abdomen upon the right side.

About three months before I saw her she was taken with symptoms upon the left side identical with those which initiated the trouble upon the right side. Dr. H. Coleman was now called, and after a careful examination diagnosed an ovarian cystoma of the right side,

and commencing trouble of the same kind upon the left side. The doctor advised an operation, and requested that I be called into the case.

Upon examination I found a large tumor high up in the right lumbar region, not very freely movable, and from the vagina it could not be reached by bimamual examination with as much force as was bearable by the patient. Upon the opposite side there could be plainly mapped out an enlargement in the iliac region about the size of a cocoanut. By the vagina this mass was found to be firmly adherent, and filling the entire left side of the pelvis, pushing the uterus forward and to the right of the median line. I gave it as my opinion that there was on the right side an ovarian tumor with long pedicle, and adherent to the abdominal walls and contents above, which accounted for the want of mobil ity, and also for the height of the tumor in the cavity, and that the mass occupying the left side of the pelvis was a cyst of the left ovary bound by pelvic adhesions. As the patient was in a fair condition as regarded her general health, and was anxious to be relieved of her suffering, I advised an operation as soon as practicable.

The patient was placed in my private hospitial, prepared for an operation, and upon October 19, assisted by Dr. Charles B. Penrose, of Philadelphia, I opened the abdomen by an incision about three inches in length between the pubis and the umbilicus in the median line. There was a considerable amount of dark fluid escaped from the incision upon opening the peritoneum, and after separating the omentum, which was adherent to the pubis, I began to release and deliver the mass upon the left side, which was found to consist of a multilocular, papillomatous, ovarian cyst, firmly bound by adhesions to uterus, bowels and pelvic walls, and also an intra-ligamentous cyst. Everything was firmly adherent, and the bleeding so free from some of the points of adhesions as to require ligatures to be used freely, styptics failing to control hemorrhage. It was found necessary to increase the size of the incision to about five inches, in order to complete the enucleation and deliver the mass, a portion of which could not be separated from the pelvic wall, and was therefore left behind. I now turned my attention to the large cyst of the opposite side — a multilocular ovarian cystoma. This was found adherent to the abdominal wall, the colon, and everything with which it had come in contact. Adhesions were separated as rapidly as possible, the trocar introduced, and as much fluid as possible evacuated, when the hand was passed in and the smaller cysts broken up, and the whole mass brought out through the incision. A ligature was thrown around the pedicle, which was about five inches in length, and after cutting away the mass the stump was dropped back. The abdominal cavity was thoroughly cleansed by irrigation, a large amount of water being left in the cavity on account of the weak condition of the patient, due to shock; a drainage tube was placed in the incision, and the abdomen closed in the usual manner. The patient was placed in bed greatly exhausted and profoundly shocked, from which she rallied in about twelve hours, and went forward to recovery without an unpleasant symptom. The patient and her family were informed that there would probably be a return of the trouble, owing to the nature of the tumors removed, and in lieu of the fact that a portion of one of the cysts could no be gotten entirely away.

The latter part of March last, five months after the operation, the patient called at my office to consult me about a pain in the left side, and about an enlargement of that side.

Upon examination I found a tumor about the size of a fetal head occupying the left side of the pelvis, firmly adherent. I advised another operation, at the same time explaining to the patient and family that it might not be possible to remove the growth, and if so, only an exploratory operation would be done, but if possible, the tumor would be removed; with this understanding an operation was consented to. The patient subsequently passed into the hands of Dr. J. M. Baldy, who operated.

These were some points in connection with the case that may be of interest, which were not known to me at the time of my taking charge of the case, nor until after she was discharged from my care. The patient had lost a sister, an aunt, and a cousin, all with a cancer.

Another point in the case was the age of the patient, She gave me her age as 49 at the time of the operation, and when she came to me again in March, she told me she was 50. In this connection, it may be proper for me to anticipate Dr. Baldy somewhat, and state that the patient died of cerebral apoplexy on the 29th day of April, and her age was published as 52 years; but I am informed by very good authority that it was, and always has been, a propensity of this woman to make herself as young as possible, and that she was in reality not a day less than 60 years of age.

Dr. J. M. Baldy reported the following history:

The subsequent history of Dr. Weeks' case is reported for two reasons—because of the unique ending of the case, and for the reason that we have need of deaths more than recoveries, at present.

I saw this patient some three or four months after the first operation, and found the conditions present very much as related by Dr. Weeks. At the operation which followed, the old incision was found perfectly united. No adhesions to the abdominal wall by intestines or omentum. Tumor as large as a child's head and filling the pelvis. The intestines and omentum were adherent over its entire upper surface, excepting at one point as small as an orange. The cyst was undoubtedly intra-ligamentous and not simply bound down by adhesions. It was composed of smaller cysts, many of which were ruptured in the enucleation. It was too low down and too universally adherent to allow of an attempt at tapping it, and the rupture was unavoidable. It was altogether the most difficult and trying operation I have ever attempted. After its removal there was but one point which was not ragged, showing the

condition of universal adhesion. There was no pedicle, and only at two points were adhesions tied. These points might have been dealt with differently, but were tied to spare time. Patches of intestine as large as one's hand were denuded of their peritoneal covering. There was considerable oozing when the abdomen was closed, but as the patient was doing badly under ether, the drainage-tube was trusted to for controlling this, and in a few hours it had all stopped. Irrigation with simple hot water was freely used. She was in bed within the hour, and soon reacted from the anesthetic. For five or six days she progressed splendidly, and would probably have continued to do so, but the drainage was prolonged beyond all use and the track became infected. There was a quick rise of pulse and temperature, which subsided as quickly within twenty hours on the discharge of a few spoonfuls of pus. She then improved steadily and was considered almost well; in fact, was to have gone home the next day. On the seventeenth day she was feeling better than she had for years, had slept soundly the night before, and had eaten a large breakfast with relish. She was laughing and joking with her nurse, when she suddenly gave a start, became unconscious, and was dead within twenty minutes.

At both operations she had behaved badly under the anesthetics. The cyst was of a malignant, papillomatous character.

The post-mortem examination revealed the following: union along line of incision perfect. Omentum adherent to abdominal walls to the left for an inch; to the right, the intestines were adherent over the brim of the pelvis and to the drainage track; at the bottom of the drainage-tube was a small quantity of pus. Pelvis perfectly smooth and clean. Spleen normal. Liver normal. Kidneys normal. Heart fatty, infiltrated. The right side dilated with a chicken-fat clot; left side, the walls were thinned. The mitral valves had undergone calcareous degeneration. Brain: about two ounces of fluid in the arachnoid cavity; cerebellum soft. In the fourth ventricle a small vessel was found ruptured, and the ventricle was filled with a blood clot. A piece of calcearous plate was here found.

This clearly indicates the manner of death. It is possible that the action of the heart under the anesthetic may have loosened the calcareous plate on the mitral valve and thus been the cause of death some time sooner than would otherwise have occured. In no other way can the death be attributed to the operation. It is unfortunate that the accident did not delay a few days longer, but then I suppose the friends would have said we moved her too soon.

It is a matter a surprise to me that there were more adhesions than the autopsy disclosed, the denuded surfaces had been so extensive. Had the trouble with the drainage-tube not occured, the patient would have been home when she died; but there are some things we can not control, and the unnecessarily long drainage here is a case in point.

Dr. J. B. Deaver exhibited a "Large Multilocular Ovarian Cyst."

The patient was from Maryland. There was considerable ascetic fluid. There was a large tumor on the left side containing colloid material. The woman had suffered considerable pain. There was also papillomatous contents, and malignancy was suspected. A smaller tumor was removed from the right side.

Dr. M. Price exhibited "A Substitute for Senn's Plates."

This is simply a transverse section of the femur of beef, which has been decalcified. It is used in the same way as Senn's plates. The openings in the transverse section are across instead of on the plane of the surface of the bone, and the absorption will take place more rapidly. The advantage over the Abbe ring is that this holds the form, while the catgut ring is liable to twist and give some trouble in its application. These plates are being used by Dr. Deaver and my brother upon some dogs, and later they will make a report of their observations

Dr. H. M. Weeks exhibited "An Antiseptic Ligature Box."

This box is presented to the profession for preserving and carrying ligatures that have been prepared and rendered aseptic or antiseptic, enabling the operator to cut his ligatures and suture, at the time of operating, without danger of soiling or infecting the portion not required for immediate use. It is made of a fine quality of earthenware, thus securing strength and durability; at the same time it is light, compact, ornamental; and last, but not least, it can be furnished at a price that will enable every one practising surgery te provide himself with one or more. The box can be had in any color desired; or with any decoration the consumer may wish.

The box is round, four inches in diameter and two inches high, with an outside cover that is held in position by a neat clamp, which, when adjusted, is prevented from slipping by a slot on either side of the band or flange at the top of the box, the screw holding the cover tightly down upon the rubber washer which encircles the top and renders the box absolutely air and fluid tight, so that the ligatures can be carried constantly in any solution desired, without danger of leakage.

The inner cover is a flat disk with a slot cut in the edge to allow it to be placed in position, and held by two small catches placed on opposite sides of the box; the small knob in the center serves to turn and place and remove the cover. There are four holes perforating this cover for the four sizes of silk generelly used, and half an inch from the edge of the cover there is a raised band, also perforated, for the silk to pass, thus making it impossible for the end of the ligature to drop back into the box when cut. This cover rests upon a ledge, and it is left in place except when necessary to fill the reels or spools with silk, or a box with solution.

The reels or spools, four in number, stand upright, and are held in position by seperate spindles. The

whole box is highly glazed; there is no metal nor anything that can be acted upon by any solutions, and the material from which it is made can be subjected to any amount of heat, either dry or boiling. It can be taken apart in a very few seconds, and every part thoroughly cleaned.

Should any of the parts break, they can be replaced, as they are interchangeable.

They may be obtained from J. H. Gemrig & Son, 109 South Eighth street, Philadelphia.

J. M. Baldy, *Secretary.*

SELECTIONS.

THUMB AND TONGUE SUCKING.

To many a child who resents weaning as an inhuman breach of maternal affection,

> "There's nothing half so sweet in life
> As love's young"—*thumb.*

Nature has designed a baby's thumb as the sweetest substitute for the mother's nipples, even for the supple stripling who can put his toe into his mouth, and wriggle off a nurse's lap like a globule of mercury. It is evident, that in spite of its horny tip, and the absence of the milky way, there is something to a baby in its own tender thumb, which adults have forgotten, and no gross soul can know. I have just asked my wife why a baby likes to suck its own thumb better than its mother's, and without intending a pun, she said, "It is because it is handy." The habit seems to verge upon a sort of self-cannibalism, without a parallel in the records of the Anthropophagi; and certainly without one in history of our Indians, whose papoose, strapped in its "raranon," has no chance to indulge in fruitless sucking, unless it sucks its tongue; and I believe that sucking its tongue and lips is only the revenge a child enjoys for depriving it of the opportunity to suck its thumb.

It is not surprising how a little habit, daily indulged in, will deform the features of the face in early life, when the cartilaginous and bony framework are soft and pliable: pulling the lobes of the ears, the lower lip, the eyebrows, each have their Nemesis in some unnatural result. I once had under my daily observation a lad who had caused a considerable protrusion, as well as tortion of the left central and lateral incisors, from the inveterate habit of biting his left thumb nail, and I am convinced that many cases of irregularity of these teeth are due to just simple but undetected causes. We know how easily teeth may be widely separated in a few hours, with wood or rubber; in a few minutes with a mechanical separator; how uneven occlusion, such as the anterior side of an inferior bicuspid meeting the posterior side of a superior cuspid, will deviate the weaker towards the median line above, or the posterior below. The constant and careless use of stiff tooth picks, even the vulgar habit of keeping one between the teeth, must do more mischief in producing irregularity than we imagine. But there is this difference between the bad habits of adult life and those of infancy; those of the former never in any way effect or alter anything but the teeth and the tranverse septa, and are not made herditary; those of the latter not only effect and alter the position of the teeth, but create abnormal developments of the whole alveolus, which frequently descend to succeeding generations. I know that this law of heredity does not apply to such abnormalities as cleft palate, hair lip, ect., frequently it follows the mature result of a habit formed in childhood, when it seems altogether absent as the result of habits begun in adult life. The irregularities of the teeth which owe their origin and first cause to habits occurring after maturity, cannot divert the direction of the anterior plate of the aleovlus, unless deliberately and persistently applied with a force that would make them exceptional.

In cases of protrusion of the upper incisors it is easy to distinguish between those of a congenital and those of anacquired form. I have one case that is the best illustration I have ever met of the former: It is a perfect V. shape from the first molars to the turned points of the centrals, and is an exact reproduction of the upper jaw of the patient's mother. These cases seem to be bred in the bone, and run in the blood, but I think the opinion of Dr. Kingsley is generally accepted, that they may have the hereditary tendency eradicated, if corrected as soon as they are developed.

Where no such hereditary transmission can be discovered, and where the pecularity is not directly due to the retarded shedding of the deciduous teeth, outside of which the permanent ones may have erupted, it may safely be credited to the habit of sucking the thumb, even if the patient or parent deny it. The habit of tongue-sucking may become so unconcious that it may go on during the day, and even all night, unknown to the patient. Sucking the under lip has been frequently noticed when the child is awake as well as asleep, and it is not uncommon to observe the habits continued until the child is into its teens.

Every one of us, no doubt, has met these cases in practice,and has found the difficulty in geting the patient to admit the soft impeachment. Very likely a thumb-sucker becomes unconcious of the habit in the delectation of the indulgence, and is as honest in his denials as the Greek sailor, who repudiated the charge of cursing by swearing by all the gods that he did not swear.

I have also a genuine case of an hereditary thumb-sucker, whose father's upper teeth were protruded by the same habit, and whose grandfather, on his father's side, had also caused an ugly deformity in the same way. To such an extent did this patient suck his thumb, that the nasal septum was deviated to the left side by the pressure of the fingers against the nose in sleeping. There was but slight respiration through one nostril. I have at my office a model showing the perfect regulation of this case, giving color to the theory that the deformity, even when transmitted for two generntions, may be remedied.

I think it will be found in almost every case of thumb-sucking that the tonsils are enlarged, and the salvia vitiated. I have not met a case of an inveterate thumb-sucker that was not also a mouth-breather, and it may be that this last habit originates as a coincidence of the former. If the patient sucks during sleep, the tongue will lie under the thumb, instead of in contact with the hard palate; the mouth will necessarily perform the act of breathing. I venture to believe that there is a good deal of superficial diagnosis and nonsensical writing indulged in as to the nasal and mouth results of mouth-breathing. Dentists who are constantly at the open mouth from childhood, have more claim to be dogmatic in such statements, and it would seem be their general opinion that while enlargement of the tonsils may occur, the assertion that uneven, irregular, or protruding teeth and arched palate result from imperfect closure of the mouth, is not sustained by facts. There may be coincidence; and these would appear to be consequences. I believe that more careful diagnosis would trace the true origin to the thumb or tongue sucking, and that the shrunken *alae* which lies close to the septum, are as certainly due to the pressure of the fingers during sleep as the fan like spreading of the inscisors is due to the thumb. Specialists are apt to become fanatical and to attribute every abnormality to a perversion of the principles they maintain; and to assert that mouth-breathing *per se*, will alter or affect the formed arch of the hard palate, is to show an ignorance of the anatomical and physiological laws of the maxillary. I admit the possibility of changing the form of the hard palate, but not by the natural or unnatural breathing. The acquired cause, if any, will be found to be in the thumb. When it is known that the spontatneous dislocation of the lower jaw has occured from vigorous thumb-sucking during sleep; that the thumb is a hard mechanical force against the roof of the mouth and the teeth, and especially that the bones of a child are so easily altered by pressure, it is no surprise to find the palate behind the incisors of a thumb-sucker, a perfect fit for the patient's thumb. The chief muscles used in sucking are those of the tongue. The center of the tongue is depressed by the genio hyoglossi, and the side elevated by the stylo glossi; and thus a vacum is created. Of course the orbicularis-oris is brought into play in seizing the thumb much more than it could be in sucking the tongue, if it is used at all in the latter, but the tongue does the sucking. It is curious how inevitably this habit will extend from the thumb to sucking the clothes, and in fact, whatever the young imp can get into its mouth. It is quite strange to witness the indifference of parents and even physicians where the habit is observed. One would imagine that the idiotic expression which often results would be sufficient to warn parents from neglecting it. If we, as dentists, have opportunity, as we should have, to watch the growing teeth as least twice a year, we can hardly fail to detect children addicted to these habits. Like sleeping with the mouth open, which can be easily cured by gently and frequently pressing the lips together in sleep, if taken in the outset, fruitless sucking can be cured by daily watching and nightly prevention. When parents are made to understand the evil consequences and the difficulty of treatment, they will be more disposed to follow the advice we give them. Some children can be easily restrained or cured by making the habit a subject of ridicule and shame; others must be put beyond the power to indulge in it. Whether you put aloes on the lips, gags on their mouths, boxing gloves on their hands, or Solomon's regulating apparatus on their buttocks, early and persistent attention will prevent one of the most unsightly deformities of the human mouth.

Just as I was closing this I was given the accompanying slip from a paper:

"According to Dr. Berillon, the well-known French specialist, the practice of sucking the thumb at night to which so many children are addicted, and of which it is next to impossible to break them, can be put a stop to by a single hypnotization, accompanied, of course, with the requisite suggestion. The child never by any chance returns to the old habit again, though his memory retains no trace of tha order of prohibition which operates so powerfully on his will."—W. G. Beers, L.D.S., Montreal, in *The Dental Record.*

THE TREATMENT OF HYPERTRICHOSIS.

The removal of superfluous hair from the face is often a matter of great difficulty, and not infrequently very unsuccessful. The hair will grow again in a provokingly presistent manner, and if too energetic treatment be adopted, a permanent disfigurement often remains to remind the practitioner of his too great diligence. I wish therefore to suggest a plan of treatment which I will briefly give details of an extreme case.

The first illustration, from a photograph, shows my little patient, three months old, before treatment. The whole right half of her forehead was covered, closely covered, with an overgrowth of long dark hair; some of the hair being fully an inch long. The adventitious hair grew over the right eyebrow and eyelid, extended thence across the nose to the margin of the left eyebrow, and, upwards, a little to the left of the middle line, to the margin of the hairy scalp. On the outer side it grew in a line from the external angle of the right eye to a little above the meatus of the right ear. The child's appearance was, as far as that side of her face was concerned, exactly like that of a Skye terrier. I deferred doing anything till the child was three months old, and in the interval thought over a good many of the plans advised to remove superfluous hair from the skin. I thought them all inapplicable in this case, and finally resolved to risk the trial of one I now venture to suggest.

When applying sodium ethylate for the removal of nevi, I had noticed that when the nevus was near the

hairy portion of the scalp, if any of it were let to run around its base, the effect was a loss of hair where the ethylate had touched. I tried the effect of the ethylate on several small hairy moles, and, finding the result to have been satisfactory, I determined to try it in this instance. Accordingly the child was put very fully under the influence of chloroform, the long hair cut short in a vertical line down the forehead for the width of an inch, and sodium ethylate rubbed over the surface very freely and thoroughly, till the skin had an orange appearance. By the time the child had slept off the effects of the chloroform, the pain of the application had ceased, so that the child was fairly comfortable. A little cold cream was then applied.

At the end of a fortnight the result of this first attempt was seen, and most satisfactory it was. The hair follicles over the greater part of where the application had been made seemed destroyed, and a whitish skin remained. Curiously enough here and there some long hairs remained uninjured. At the end of a month I tried it again, but this time I attacked the surface of the forehead from the eyebrow upwards, leaving the hairs of the eyebrow alone. The result was the same. Next time I applied the caustic from the margin of the eyebrow to the ear. Then I waited some time to see the result. When the child was a year old the forehead was fairly clear of hair, but the eyebrow and the eyelid were still covered with long hair, and that from the eyelid was growing over the eye. I now very carefully op plied the ethylate over the eyelid. There was, as might havé been anticipated, a good deal of subsequent edema of the lid, but it all passed off very nicely. The eye brow now remained, and this I very lightly rubbed over with the ethylate, but this slighter application seemed to have no effect. A second attempt, however, was more successful, for whilst it did not destroy the hairs entirely, a new growth of weaker, shorter, and finer hair sprung up. The subsequent progress of the case was slow. It consisted in touching from time to time the hair-follicles that had not been fully destroyed by the previous applications. The child a healthy girl, is now over six years old, and the second illustration, which is from a recent photograph, shows her present appearance. Her mother writes to me that there is now no disfigurement, the skin hairless, smooth, and nice looking, but I think the picture speaks for itself.

I wish to add, in conclusion, my conviction of the superiority of sodium ethylate in the treatment of hairy moles over any other methed of treatment. That by electrolysis is often painful, always tedious, and only applicable for limited hypertrichosis, such as that on the lips or chin. In the cases of moles where we want not only to remove hairs but also the discoloration of skin as well, the use of the ethylate has given me better results than the application of any other agent.

Though I have used this method for several years, I have waited till now before bringing it forward, so that I might not without sufficient foundation add another to the list of new methods of treatment, and that I might feel sure that its further trial would not be found disappointing.—Arthur Jamison, M.D., C.M., in *The Practitioner.*

Speaking of Movable Heart, Prof. Rumpf says that of five cases studied by him, three were the results of dietetic and medicinal attempts to cure obesity, one occurred after violent nervous excitement, and in one no cause could be assigned. The examination of the heart in the erect or horizontal positions, and with the thorax bent forward shows nothing whatever abnormal; when, however, the patient lies first on the left and then on the right side, the abnormal mobility of the heart becomes very distinct. In one case the apex beat shifted 13 centimetres, in another from 4 to 5 centimetres. When the patient lies on his left side the area of the cardiac dullness seems larger, when on his right smaller, while at the same time the position of the aorta and of the pulmonary artery is also changed; in one case they moved 1 centimetre in the direction of the displaced heart. Dr. Rumpf considers the movable heart to be not a mere irregularity, but a pathological symptom, as the average normal movement of the heart is at most 2 centimetres to the left and 1½ centimetres to the right, and as he observed this dislocation in one case of tubeiculosis of the lungs and in one case of muscular atrophy.—*Lancet.*

A Gargle in Quinsy.—Dr. W. M. Beck, of Kensington, Kan., writes: "In your 'Medical Item' column I notice that Sajous recommends guaiac as a gargle for early stages of quinsy. Chloral hydrate has been far more efficient in my hands; in fact, nearer a specific than anything recommended in the text books. Three or four grains to the ounce of glycerine may be used as a gargle. I mention this because no reference is made by Ringer or other therapeutists to this fact. Its efficiency and modus operandi are at once apparent when we consider that it is locally antiseptic, astringent and sedative."

German Physicians and the Paris Exposition.—At a meeting of a Berlin society of retired medical men, not long since, a resolution was adopted calling upon German physicians to keep away from the Medical Congress to be held at Paris this summer. The members of this society were very promptly rebuked by the *Berl. Woch.* for their action, and the journal urged the active members to take part in the meetings, and to show that they did not allow political feeling to interfere with scientific progress. Some hot-headed Frenchmen were incensed when it was decided to hold the next International Congress in Berlin, but we believe they have since come to look at the matter in a calmer spirit, and it is hoped that the French representation at Berlin will be fully up to the average of that at previous congresses.—*Med. Rec.*

ORIGINAL ARTICLES.

RESULTS OF SUSPENSION IN THE TREATMENT OF AFEECTIONS OF THE SPINAL CORD BY THE "SHAW APPARATUS" AND TECHNIQUE.

BY ALEXANDER B. SHAW, M. D., ST. LOUIS,

Professor of Diseases of the Min l and Nervous System and Electro-Therapeutics, Beaumont Medical College; Consulting Neurologist to the St. Louis Insane Asylum; Alexian Bros. Hospital; St. Louis Railway Hospital, Etc.

June 16, 1889, I began a series of experiments with the apparatus devised by me for suspension in affections of the spinal cord. This is shown in the accompanying cut.

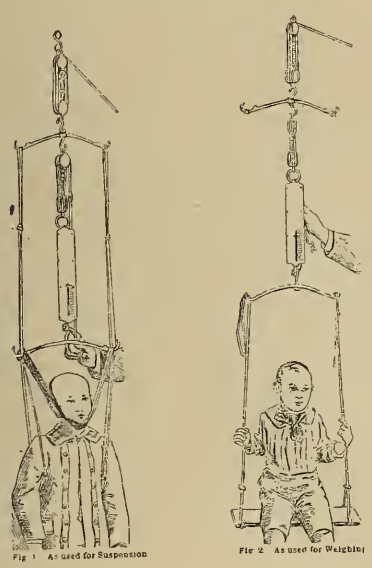

Fig 1 As used for Suspension

Fig 2 As used for Weighing

After personally suspending a number of patients every two or three days for five or six weeks, I turned the cases over to Drs. Fleming and Hochdorfer, who have continued the treatment after the technique which I have formulated and published, and to-day received the following letter from Dr. Fleming which speaks for itself:

St. Louis, Aug. 22, 1889.

Dr. A. B. Shaw.—In submitting the following report, I have thought it unnecessary to go into a detailed clinical history of cases; I do this because in great part, all cases of tabes dorsalis have the same prominent clinical symptoms which are familiar to all readers of medical literature; hence a recapitulation of what is already known to the reader I think would be superfluous. But while I shall not go into detail as to the clinical symptoms, it might not be out of place to state the age, nativity and general condition of these patients as we found them at the beginning of the suspension method of treatment.

We have been treating, in all, ten cases. Several of these, as you know, are not such as one would have any hopes of benefiting, while others, that I shall not report, have received apparently some relief. In this communication I shall only refer to the patients: Fred. Hauche, Nicholas Ziegler and Walter Ashton. The two former being affected with tabes dorsalis, and the latter cerebro spinal sclerosis.

Case I.—Tabes Dorsalis.

Fred. Hauche, æt. 32, German, watchmaker, weight, 125 pounds; height, 5 feet 11 inches; light complexion; family history good. Patient's previous health was fairly good—says he had eye trouble about 8 years ago. Patient dates his present illness from a burn he received over the left half of his face and neck, and the left leg and thigh. From this, patient was confined to bed nearly 3 months, and then he noticed for the first time that he had difficulty in walking. This difficulty grew worse quite rapidly until he was scarcely able to walk, even with assistance. When he came under our care we found him in an almost helpless condition; he was not able to walk without assistance. The patient was at times peevish, again irascible or morose and melancholy. During the first two or three suspensions we found it necessary to use some persuasion in order to get him over to the "swing." This patient appeared to be far along in the second stage of the disease. The greatest change so far appears to be in his locomotion; he is now able to walk all about the institution, and to-day (Aug. 22) walked up a flight of 22 stairs; this being, he says, the first time he has been able to climb any elevation since his illness began. He had no support on going up the stairs other than what he got by laying his hand on the banister. What appears rather strange, is that since his locomotion has improved there has been a decided mental change—he now desires and seeks social intercourse with his fellow-patients.

I cannot say that this patient has gained in weight, but there is a marked change in his general appearance. He says there has been but little or no change in the condition of his eyes. The feet are still thrown out in the peculiar manner usually seen in this class of cases. The patient at present complains of no pains in his body; bowels and bladder are evacuated normally. Patient says there is little or no perspiration from the limbs. There is now no anæsthesia nor hyperasthesia. While suspending this patient there seems to be an extension of at least 5 inches in the length of the neck. There is some atrophy of the posterior cervical muscles. The backward bending of the knees so particularly marked when we began the suspension treatment is very much less.

Case II.—Tabes Dorsalis

Nicholas Ziegler, æt. 66, German, tailor. Got no history of disease from this patient further than that he had some rheumatic ailment which occurred several years back.

When he first came under notice, he was able to walk with the use of a cane but was in danger of falling, which he did frequently when turning or stepping on some irregularity. He was troubled considerably by the "girdle pains" which have, since suspension, become much less. He is quite fleshy and can stand but a short suspension without becoming much fatigued. From a state of almost helplessness he has improved until he can walk almost as straight as any one. After suspending him for a few weeks he was so much improved that he walked into the city (6 miles), stayed several days and then walked back again. He was again laid off of treatment by having an attack of acute diarrhœa, which lasted about ten days. During this time he was for several days unconscious; after consciousness was restored there was such marked hyperæsthesia that the patient could scarcely bear the slighest touch on any part of the body. His eyesight has, he says, been somewhat improved; defecation and urination are now normal; rheumatic pains less.

Case III.—Cerebro-Spinal Sclerosis.

Walter Ashton, æt. 47, English, teamster, cowboy,etc. First noticed his ailment in 1880; has been treated by different physicians almost constantly ever since.

When this patient entered the poor house he was having difficulty in urinating; frequently experiencing marked tenesmus, and had to pass his urine several times during the night. There was a decided tremor when any coordinate movement was attempted, and placing fluids to his mouth was often quite impossible. Speech was defective, some words being very difficult for him to articulate. This patient's power of locomotion was also somewhat impaired, *i. e.*, ataxic.

In this case we find at present decided improvement in several respects; first, urination is now normal as to frequency, he has no desire to urinate during the night, and is not disturbed by tenesmus or burning sensations.

As to his eyes, he claims he can see further and that there is not so much oscillation. When he came in there was transverse and vertical nystagmus. I find there is still slight transverse nystagmus. Patient is now able to articulate more distinctly than before using the suspension. But the most decided change has taken place in his movements not only in the arms but also in the legs. The patient can hold a basin, glass or other vessel filled with water in his hand with nearly as much steadiness as one that never suffered from nervous illness. This man for some time has been able to do considerable light work; he appears to be brighter, says he thinks the treatment is doing him good and wants it kept up.

The following table shows dates of suspension, duration of same and amount of tractile force exerted registered in pounds. Diminution in amount of tractile force below maximum, attained in either case, was due to complaint of pain in neck by patient. All suspensions were made after the technique of Dr. Shaw, as published in the August number of the St. Louis *Med. and Surg. Jour.*

Fred. Hauche.			Nicholas Ziegler.			Walter Ashton.		
Date 1889.	Duration of Suspension.	Lbs	Date 1889.	Duration of Suspension.	Lbs.	Date 1889.	Duration of Suspension.	Lbs.
June 16,	:30	50	June 16,	1:	50	June 29,	1:35	90
" 20,	1:20	80	" 18,	1:10	64	" 30,	"	100
" 22,	1:30	80	" 20,	1:	80	July 3,	2:	"
" 24,	1:40	100	" 22,	1:15	96	" 6,	2:15	"
" 26,	1:30	112	" 24,	2:	100	" 9,	3:	112
" 28,	2:45	128	" 26,	2:20	112	" 12,	"	"
July 3,	2:15	128	" 28,	3:	"	" 16,	"	"
" 6,	"	"	" 30,	3:	"	" 19,	"	120
" 9,	2:30	112	July 22,	1:40	100	" 22,	1:30	125
" 12,	"	"	Aug. 5,	1:40	112	Aug. 5,	1:15	128
" 16,	2:50	"	" 10,	1:45	"	" 7,	1:30	"
" 19,	2:30	115	" 12,	"	"	" 10,	"	"
" 22,	"	"	" 15,	"	"	" 12,	2:	"
Aug. 5,	2:50	120	" 17,	".	"	" 15,	"	"
" 7,	"	"	" 20,	"	"	" 17,	"	"
" 12,	"	"	Between July 22, and June 30, patient had diarrhœa; from July 22 to Aug. 5, missed by being absent.			" 20,	"	"
" 15,	"	"						
" 17,	"	112						

A. W. Fleming, M. D.

THEINE IN THE TREATMENT OF NEURALGIA.

BY J. K. BAUDUY, M. D.,

Professor of Mental and Nervous Diseases, Missouri Medical College, St. Louis.

A great deal has been said in recent medical literature about the efficacy of theine in the treatmentof neuralgia, but it is only within a comparatively recent period that I have had an opportunity of testing its merits. I wish to relate the histories of two cases which I treated with it by the hypodermic method.

A lady not long since applied to me for treatment; she had been afflicted with sciatica for weeks. I made use of the well known remedies usually prescribed in such cases,as quinine in large doses,hypodermic injections of atropine and morphine, strychnine, arsenic, and liberal doses of iodide of potash. In conjunction with these I resorted to the use of the continuous galvanic current, applied over the nerve, the seances lasting 15 minutes, with a strength of current of from 20 to 25 m. amp.

I derived no more satisfactory results therefrom than the temporary relief afforded by the galvanism. I may

say, *en passant*, that the continuous galvanic current. in my experience, has heretofore proved a most successful therapeutic resource in such cases. In the patient alluded to, the application would afford relief for a day or two, when the pain would invariably return. After several weeks of such unsatisfactory progress, I essayed the injection of ¼ grain of Merck's theine, rapidly increasing the dose on successive days, to ½ grain. The relief was immediate and permanent.

In about two weeks after I had discharged the patient as cured, she returned to me complaining that the pain had developed in the other limb. I immediately injected ½ grain of theine into the painful area and applied the continuous galvanic current. This afforded the same satisfactory result, with no recurrence of the trouble, so far as known.

In inserting the needle of the syringe, I ran it down as near to the sheath of the nerve as I could.

In another case, sent to me by my friend Dr. Spencer, there existed an obstinately recurring pain in the occip ital region and at the point of exit of the supra-orbital nerve. I rang all of the changes of the classical reme dies for such affections, but the patient grew steadily worse. Paroxysms of pain, fever, insomnia and other symptoms unnecessary to relate, made me think at times of the possible existence of meningeal inflammation.

For two weeks I treated without making the slightest impression on the disease. I then resorted to hypo dermic injections of theine in the arm of the patient, in the same doses as used in the case referred to above, and with a similar happy result.

It is strange that the potency of this drug should be so little known to the profession. It certainly produces more permanent effects, in the treatment of this affection, without superinducing any unpleasant or even noticeable systemic manifestations, than any other remedy with which I am acquainted. I can honestly recommend its trial to those of my professional brethren who have had no previous experience with it, believing that the results which they obtain will not be very dissimilar from those which I have just related.

Artificial Hunyadi Janos Water.

		PARTS.
℞	Potassii Sulphatis,	0.5
	Sodii Chloridi,	14.0
	Sodii Bicarbonatis,	59.9
	Sodii Sulphatis exsiccat,	180.0
	Calcii Sulphatis precip.,	15.0
	Magnesi Sulphatis,	24.5
	Ferri Sulphatis exsiccat.,	2.0

To make a mixture for 10 litres of artificial water.

To prepare an ordinary dose, put a teaspoonful of the mixture in a half-pint bottle, half fill it with water, shake, and then fill up with water charged with carbon dioxide.—*Progres Med.*

REPORT ON PROGRESS.

OPTHALMOLOGY.

BY R. L. THOMHSON, M.D.

I.—Abadie's Method of Performing Iridectomy.
II.—Central Scotoma and Eclipse of the Sun.
III.—Carbolic Acid for the Relief of Pain Following Evisceration of the Eye Ball.
IV.—Enucleation in Panophthalmitis.
V.—The Prevention of Blindness from Ophthalmia Neonatorum.
VI.—Treatment of Granular Conjunctivitis by Corrosive Sublimate.
VII.—On Some Forms of Traumatic Keratalgia.
VIII.—Strophanthus as a Local Anesthetic.
IX.—On a Case of Subconjuctival Cysticercus.
X.—Notes from Ophthalmological Section of the A. M. Association Meeting at Newport.
XI.—The Pathology of Albuminuric Retinitis.
XII.—The Magnet Operation.
XIII.—Notes from the Meeting of the American Ophthalmological Society.

Abadie's Method of Performing Iridectomy.

The *N. Y. Med. Jour.* gives the following description of Abadie's New Method of performing iridectomy:

"With two sharp lance-knives he makes simultaneously two incisions, 4 or 5 mm. in length, one above and the other below the corneal margin. He then introduces the scissors-forceps, one arm of which is pointed, through the center of the lower section and passes the pointed arm beneath the iris, and then cuts right and left, circumscribing the apex of a triangle. He then introduces the iris-forceps, seizes the portion of membrane detached by the two preceding cuts, draws it out of the wound, and then cuts it off at the base of the triangle. This leaves a large, triangular, gaping hole."

From this description it seems evident that this procedure is far inferior to the old operation. A pointed instrument cannot be introduced between the iris and the lens without danger of wounding the capsule of the lens. The introduction of any instrument into the anterior chamber of the eye is attended with more or less danger and to place it in the posterior chamber is more dangerous still.

Central Scotoma and Eclipse of the Sun.

Three interesting cases are reported by Dr. Magawly, of St. Petersburg (*Br. Med. Jour.*) in which two men and a boy, while looking at an eclipse of the sun with unprotected eyes, suddenly become aware of dark spots in their visual fields. On examination Dr. M. found an identical train of symptoms in each of the cases. The vision was lowered to $^{4}/_{10}$; there was a fairly extensive scotoma for red (the defect having half a foot in diame-

ter at ten feet); no ophthalmoscopic changes were discovered. After a long stay in a dark room and the wearing of protecting glasses afterward, all three of the cases recovered perfectly.

A case came under the writer's observation in which muscæ volitantes were produced by exposure of the eye to the unmitigated rays of the noonday sun. The condition was permanent, or at least had not passed off at the expiration of several years.

Carbolic Acid for the Relief of Pain following Evisceration of the Eye Ball.

Dr. Prince, of Illinois, thinks that pain following this operation is due to pressure on the nerves on the inner surface of the sclerotic. He recommends that pure carbolic acid be applied to this surface, on a cotton holder.

The enucleation of a painful eye-ball is followed by such prompt and complete relief, and attended by so little danger to life or to the other eye, that evisceration of the ball has not, nor is it likely to, become a very popular operation.

Enucleation in Panopthalmitis.

Panas, of Paris, thinks that enucleation should be performed as soon as the efforts made to arrest the suppurative process in the eyeball have proved futile. Even when the panophthalmitis is in full blast, the operation should be done, provided that there are no lesions present which would indicate a generalization of the infection, and provided that the patient has no constitutional defect, such as albuminuria or diabetes. Of course rigid antisepsis is always to be employed.

Rolland recommends the following method of enucleation in cases of panophthalmitis: The conjuctiva is to be detached from the cornea, and the eyeball is then to be split open in the horizontal diameter with a cataract knife. The cavity of the sclera is then to be injected with some antiseptic solution by means of a syringe until all the contents of the sclera have been washed out clean. Then the collapsed eyeball is to be enucleated in the usual way, and the orbital cavity is immediately washed out with some antiseptic solution. Finally, after all hemorrhage has ceased, the clots are carefully removed, and an antiseptic bandage applied.

The Prevention of Blindness from Ophthalmia Neonatorum.

From time to time some of the leading physicians of England have endeavored to develop some plan or inaugurate some measure by means of which the ignorant may be taught to preserve the vision of new-born children suffering from ophthalmia neonatorum. Recently Sir W. Foster has brought the question before the House of Commons (*Br. Med. Jour.*), and urged that the Government take measures to diffuse knowledge among the poorer classes as to the danger of the disease and the necessity for prompt treatment. Nothing practical, however, has been proposed.

The *Journal* says: "It is certainly a reflection upon our civilization that a disease which is both preventable and curable should be allowed year by year to blind some hundreds of children, and if by any means the Government can mitigate the evil, it is surely its duty to do so. The objection that if it took measures against this disease it might be called upon to do the same for others, has absolutely no force. In the first place, the legislature does pass enactments to prevent the spread of zymotic diseases, and insists on vaccination."

In Ireland, a circular is issued to the medical officer of each dispensary district containing the following suggestions:

"You should be careful to see that the child's eyes are carefully washed immediately after birth, and you should give instructions that the child should be protected as far as possible from draughts of cold air. It would also be desirable that the parents should be instructed that on the slightest appearance of inflammation indicated by red or swollen eyelids, the child ought to be brought to you for treatment without a moment's delay, as the disease is most dangerous, and if proper treatment be not adopted the sight of one or both eyes may be lost." A copy of this circular is also sent to each midwife, enclosed in a polite letter commencing "Madame," and couched in terms which we think might rather puzzle Sairey Gamp. It is most important that all documents issued to parents before the birth of the child should be accompanied by advice pointing out the danger of the disease and the necessity for treatment, and it surely would be well in the case of midwives, to go further and suggest that the vagina during labor should be irrigated with an antiseptic solution, and to give more definite instructions as to the manner of cleansing the child's eyes. Much will be done also to check the evil by the instruction of the nurses who now assist the poor in many parishes.

It is a custom very universally practiced among mothers of the poorer classes in this country to "milk a little breast-milk" into the eyes of their new born babes. When once purulent inflammation of the conjunctiva is set up milk has no power to stop it, or even to mitigate it.

A solution of nitrate of silver is almost a specific in these cases, and if the cornea has not become involved this remedy together with cleanliness will very rarely fail to effect a cure.

It is the visiting physician's duty to see the new-born child's eyes at each visit that he makes the mother during the first few weeks after confinement.

The Treatment of Granular Conjunctivitis by Corrosive Sublimate.

Arnauts (*Annales Oculistiques*, Jan., Feb., 1889) gives some records of the results obtained in the treat-

ment of trachoma, by corrosive sublimate, at the clinic of Dr. Romiée, during three years. His experience is strongly in favor of this remedy, in preference to the more commonly used nitrate of silver, sulphate of copper, and other caustics and astringents. He is especially pleased with its effect in old chronic cases, with severe pannus; and states that the disappearance of the corneal vascularity is so rapid that it suggests some special action of the sublimate on the newly formed vessels.

The following is the method employed. The patients are seen if possible, twice a week, and at each visit, after instillation of a few drops of a five per cent. solution of cocaine, the conjunctival surface of the lids is brushed with a solution of corrosive sublimate, 1 to 120 or 1 to 100. In addition, collyria of the same salt are given, of the strength of 1 to 500 or 1 to 400, which the patients are directed to drop into the conjunctival sac three times daily. The drops give rise to some irritation and conjunctival injection, which are said to pass off in a few minutes. In sensitive patients, a weak solution of cocaine may be previously applied.

In the *Recueil d' Ophthalmolgie* for February, 1888, Staderina writing on this subject gave a very favorable account of his experience in the use of corrosive sublimate, stating that the results obtained by its employment in all stages of granular conjunctivitis were very satisfactory. He suggested that its action was that of an antiseptic, and a solvent of the lymphoid infiltrrtion in the submucous tissue. If the microbe described by Sattler, Poncet and others, be the chief or sole cause of trachomatous conjunctivitis, corrosive sublimate should prove of great efficacy in the treatment.—*Ophthalmic Review*, May, 1889.

Some Forms of Traumatic Keratalgia.

Dr. Bronner (Bradford) read a paper before the Ophthalmic Society of the United Kingdom, on this subject and reminded the Society that Dr. Grandclement had drawn attention to the affection at the Ophthalmological Congress in Paris in 1888. The peculiar feature of these cases was the severe pain resulting from a very small wound of the cornea, which pain recurred usually in the mornings, often for several months. He read notes of some cases, in one of which the pain lasted for eight months, and was so intense that the patient wished to have the eye removed. Relief was obtained by excision of a small macula at the sight of the wound. In another patient the pain continued for two years. The author suggested, as treatment for such cases, the use of hot fomentations for several weeks, followed by massage with yellow oxide of mercury ointment. If these remedies fail, the excision of any cicatrix resulting from the wound should be tried.

Strophanthus as a Local Anesthetic

Many of the drugs which are useful in the treatment of cardiac disease also possess a local anesthetic action. There is, of course, no connection, as far as can be seen at present, between the two actions. The local anesthetic action of erythrophleine was investigated last year by many observers; the conclusions arrived at were that, although it possessed a powerful local anesthetic action, it causes irritation and dilatation of the vessels of the conjunctiva, and in some cases even severe inflammation. It was thus much inferior to cocaine, whose action is accompanied by a constriction of vessels and consequent pallor of the part. Helleborin, the glucoside from the Christmas rose, is also a local anesthetic and cardiac tonic; one-fortieth of a grain in solution placed on the conjunctiva of a rabbit causes complete anesthesia in 15 minutes, and there is at the same time no interference with the movements of the pupils and no dilatation of vessels. The action of this glucoside is, therefore, like that of the alkaloid cocaine; but it has not yet come into general use. Steinach has lately shown that strophanthus seeds contain a body not identical with strophanthin, which when placed on the conjunctiva produces in 25 to 30 minutes complete anesthesia, lasting from two to twelve hours. There are no great signs of irritation, but if applied to the eye of man it causes a slight feeling of burning, with a passing hyperæmia of the conjunctiva. This condition may pass on to cloudiness of the cornea in animals. The local anesthetic action of strophanthus is, therefore, chiefly of pharmacological interest, like that of erythrophleine. Cocaine still holds its own when judiciously employed.—*Brit. Med. Jour.*

On a Case of Subconjunctival Cysticercus.

Mr. Gunn for Mr. Werner (Dublin) read notes and exhibited drawings of this case. The patient was a lad, æt. 7 years, and on depressing his right lower lid a smooth ovoid semi-translucent cyst was exposed, the size of a large pea and of reddish-yellow color. It was situated between the sclera and conjunctiva and was freely movable under the latter. When examined by focal light a small opaque circular spot was visible, near the center of its anterior surface which cast a shadow in the anterior of the cyst. After removal, which was accomplished without difficulty, the microscope revealed in the interior of the sac the head and neck of a bladder worm, with four suckers and a circle of thirty hooklets, large and small, to which succeeded a much wrinkled neck, sprinkled over with the usual calcareous corpuscular particles. Measurement of the hooklets and the appearance of the walls of the vesicle proved the parasite to be cysticercus cellulosæ, the cystic stage of tenia solium.

Notes from the Ophthalmological Section of the American Medical Association.

Dr. Chisholm, of Baltimore, still thinks there is much needless and annoying restraint placed upon patients after cataract operations. He closes the eye that

has been operaten upon with adhesive plaster and leaves the fellow eye open.

Dr. Connor says he has yet to find a well-authenticated case of alcoholic amblyopia in which tobacco could be entirely excluded. He thinks it is tobacco and not the alcohol that produces amblyopia. Most oculists are inclined to think it is the two combined that causes the trouble.

Dr. Knapp, of New York, read a paper in which he reported sixty-one cases of cataract extraction in all of which he had attempted to divide the capsule of the lens while making the corneal section. In sixty one cases he had succeeded. In one case, that of a hypermature cataract the knife would not cut the capsule; he made a peripheral capsulotomy and the lens came out without difficulty. In another case the knife would not pass through the capsule so he had to partly withdraw it, this permitted the aqueous to escape; the iris fell before the knife and was cut so that an iridectomy had to be performed. In a third case the point of the knife entered the substance of the iris and had to be partly withdrawn; the iris was cut. Dr. Knapp does not think that this method has sufficient to justify its adoption instead of dividing the capsule in the usual way.

Dr. H. Gifford, of Omaha, Neb., presented a paper in which was reported a case of embolus of the inferior retinal artery, visible with the ophthalmoscope. The embolus disappeared and recovery of the greater part of the field took place under the use of massage and nitrate of amyl.

Dr. E. J. Gardiner read a paper on "Non-Surgical Treatment of Convergent Strabismus." He treated twenty-five cases by fitting glasses and using atropia, something more than one half were relieved of the squint.

The Pathology of Albuminuric Retinitis.

Weeks' (*Archiv. of Oph.*, xvii, 3) observations are based upon the histological examination of six eyeballs removed from as many patients who had suffered from or died with disease of the kidneys. He concludes that two classes of retinal disease are included under the present name of albuminuric retinitis. One depends almost entirely on the condition of the blood brought about by an acute disease of the kidneys, the renal symptoms preceding the change in the retina; the other on a general (systemic) diseased condition of the arteries, capillaries, and to a less extent, the veins, in which the ocular changes and symptoms may and not infrequently do precede the kidney symptoms. To the first class belongs the retinitis of pregnancy, scarlitina, diphtheria, etc., and all forms of acute diffuse nephritis. In these cases the edema and white plaques are the first evidence; hemorrhages, more or less numerous, often follow. To the second class belong the cases in which the first retinal change is a hemorrhage or a few small hemorrhages, usually in the vicinity of the macula. The œdema and white plaques appear later. Contemporary with, preceding or following the hemorrhages in the retina, we may find evidence of capillary hemorrhages in other parts of the system. The first variety may be termed an irritation nephritis, due to the effect of a morbific element on the kidney tissue, in which the kidney usually becomes enlarged and the circulation interfered with by pressure on the vessels from the swollen tissue. The latter variety is rather a strangulation nephritis, in which the blood supply is cut off by arterial stenosis, the kidney being always found contracted, and in which the morbific element contained in the blood causes a thickening and degeneration of the walls of the vessels of with a diminution of their caliber. Both conditions may exist at the same time in varying degree. A large percentage of the cases of retinitis accompanying albuminuria undoubtedly belong to the latter category.

The Magnet Operation.

Neese says: "For the successfull extraction of foreign bodies situated in the posterior portion of the globe, viz.: (1) the foreign body must be freely movable; (2) the distance to it must be short. When surrounded by exudative masses, firmly imbedded in the membranes of the eyeball, or enclosed in a capsule of connective tissue the foreign body is immovable, and therefore inaccessible to the magnet. The advantages of early operation are therefore quite obvious.

Notes from the Meeting of the American Ophthalmological Society.

In speaking of enucleation of the eye in panophthalmitis, Dr. Noyes, of New York, said: "It seems fair to conclude that whilst a small risk to life is incurred by enucleation of the eye, the supposed increased risk by the existence of suppurative panophthalmitis is not so far justified by the facts as to bar its performance in this condition.

Malarial Keratitis.

Dr. Kipp, of Newark, N. J., read a paper in which he stated that he had seen one hundred and twenty of these cases. In all there had been paroxysms of malarial fever, and in ninety per cent. the corneal inflammation followed a few days after a paroxysm. The inflammation of the cornea occurred in the form of serpiginous ulceration, with nervous prolongations.

Drs. Gruening and Noyes, of New York, considered the corneal lesions, described by Dr. Kipp due to microbes. If they are correct, Dr. Kipp's treatment, which consists in remedies directed to the general condition, and in mild cases with warm fomentations, is all wrong. In severe cases, however he applied the actual cautery to the surface of the ulcer, or applied a solution of nitrate of silver.

It is well to look after the general health of patients,

but serpigenous ulcers must receive active local treatment or they will destroy the eyes.

The Treatment of Caries and Necrosis of the Orbit.

Dr. H. Knapp, of New York, read a paper on the Treatment of Caries and Necrosis of the Orbit.

The upper wall of the orbit is the most frequent seat of disease, and here its consequences are most dangerous. In every case of caries and necrosis of the orbit the condition of the neighboring cavities, and especially the nose, should be carefully investigated. Foci of suppuration should be freely opened, the cavity thoroughly cleansed and drainage established. This can be well accomplished by small silver tubes provided with flanges Rough bone should be scraped away with a sharp spoon. Necrosed portions of bone should be removed as soon as they become loose or when they can be detached without injury to adjacent tissues. The eyeball should be protected, and if there is insufficient closure of the lids, a plastic operation should not be postponed until the cornea becomes ulcerated from exposure.

Dr. Theobald, of Baltimore, recommends the application of a ten per cent oleate of veratria to the temple and forehead, once a day for three or four days, to facilitate the determination of astigmatism. He uses this in conjunction with atropia.

A Case of Amblyopia due to Chloral Hydrate.

Dr. W. F. Mittendorf, of New York, reported a case of amblyopia due to chloral hydrate. The object was to put on record a case of toxic amblyopia, due to chloral hydrate. The patient had for six months been in the habit of taking 40-60 grains of the drug at night to induce sleep. Suspension of the drug relieved amblyopia.

TRANSLATIONS.

HEREDITARY SYPHILIS.

Series of Lectures delivered at l'Hopital Saint Louis by Professor Fournier. Translated by Dr. Benno von Steinmetz.

Lecture III.

Gentlemen.—In my two previous lectures, I demonstrated to you, that hereditary syphilis can be transmitted through the father, the mother or through both parents together; and that there are consequently three different kinds of hereditary syphilis.

One point presents itself now, which needs explanation. Are these three heredities equally injurious, or are they so only in different degrees? Is paternal hereditary syphilis more or less grave than maternal; more or less grave than that of both parents united?

Clinical observation has formulated answers to these questions and permits us to respond (1) that hereditary syphilis of maternal origin is infinitely more injurious than that of paternal origin; (2) that heridity of mixed origin is the most injurious of all.

A few comments on these answers will not be out of place here:

The greater perniciousness of maternal heridity can easily be comprehended. It is derived from the different parts which the progenitors take in the creation of the new being. The father is only active at the moment of fecundation, whereas the mother not only takes an active part at that moment, but her influence lasts during the whole time of intra-uterine life; she furnishes all the material which is necessary for the growth and nutrition of the fetus, and it is therefore natural that her state of health is closely interwoven with that of the embryo.

The number of observations where heradity is alone at play is not great, but nevertheless sufficient to allow me to demonstrate to you the truth of what I claim for it above.

I have examined in thirteen cases, the families in which the mother alone was diseased.

These thirteen cases have furnished twenty-eight pregnancies, with the following result: Seven children were born alive, of which four were syphilitic; five children were still-born, and the remaining sixteen terminated in abortion. Thus 21 deaths in 28 pregnancies. This is a mortality or 80 %.

These are eloquent figures, and speak well for themselves since we find nothing resembling them in paternal heredity.

Some of these observations are already known to you, nevertheless I will recall them to your memory.

A diseased woman, infected by her own child (who was infected with the disease by her nurse) had four pregnancies, and aborted four times.

A wet nurse, infected by her nursling, has six pregnancies, three terminating in abortion and three by the birth of syphilitic children, which died rapidly.

A healthy young woman married a healthy young man and has two sound children; the husband contracts syphilis, infects his wife and dies shortly after.

The widow is married again to a healthy man; she has six pregnancies, with the following results: The first is terminated by the birth of a syphilitic child, which dies in six weeks; the second by the birth of a syphilitic child, dying in 5 months; the third child died at the age of 6 months, of syphilis; the fourth, fifth and sixth were born spyhilitic, and died five months after birth.

These observations, as well as the preceding, are convincing, and we can draw the conclusion from them that hereditary syphilis of maternal origin is infinitely more distructive than that of paternal origin.

The second proposition which we have emitted in the begining of this lecture is that mixed hereditary syphilis is more pernicious than that exclusively from one of the pregenitors.

More is to be feared for the child if the father and mother are diseased than if the one or the other alone is afflicted.

The danger is indeed very great for the child, because two injurious influences are united against it. Experience confirms these inductions. Observations are abundant, and I will quote only one to you, which comes from Diday.

A syphilitic woman marries a healthy man, and has several sound children. But some time later she re newed the acquaintance of the man who had diseased her before marriage, and is impregnated by him; the ensuing child is born syphilitic. Thus, if one parent is syphilitic alone, there may be healthy children; both being diseased however the issue is nearly always syphilitic. It is difficult to find a more demonstrative case than the foregoing.

I have gone deeper into these researches, and have tried to determine as exactly as possible the relative danger with respect to infection and mortality; and I have separately established the proportion of the infectiousness and the mortality in the cases where the father alone was infected, where the mother alone was diseased, where both parents were syphilitic; and I have compared the different cases, the one with the other. We may perceive the result in the following table:

	Per cent Infected.	Per cent of Mortality.
Paternal Hereditary Syphilis	37	28
Maternal Hereditary Syphilis	84	60
Mixed Hereditary Syphilis	92	68

To translate this table into common language, the result is: that hereditary syphilis of paternal origin is least often transmitted and it produces the least mortality; that hereditary syphilis of maternal origin is infinitely more dangerous because it is manifested twice as often as that of paternal origin, because the ratio of mortality is more than double that of the former, because it is, in a word, more than twice as frequent as that from the father; that the heredity which is most to be feared is that of mixed origin, because it shows the highest indication of destructiveness and mortality.

These figures are therefore extremely significant.

Let us now study the diverse conditions more or less known, which can exert their influence in hereditary syphilis.

One fact, which is certain, the truth of which impressess itself on us at the very beginning of the study of this subject, is the following: Hereditary syphilis is not unavoidable, and is not certain to follow in any case, whether it be the father, the mother or both parents united, who are infected with the disease.

As to the capability of the father for infection, I have spoken to you already in my preceding lecture, and have quoted facts and cases in support of this truth; it would be an easy matter for me to cite many other cases, but I will only relate one more to you, which case is noted by Langlebert. A syphilitic husband infects his wife, and has by her two syphilitic children; the same man keepsng a mistress, who had a child by him which did not inherit syphilis, but inherited a malformation of the thumb, which malformation existed in the father's family.

Hereditary syphilis is not unavoidable when the mother alone is affected. Here also we have examples in abundance. A short time ago all saw a woman at the clinic, presenting a specific ulcerative glossitis, who had a healthy child in her arms.

Finally, we find that hereditary syphilis of mixed origin is not always transmitted, as numerous observations prove.

Now, if this be the case, that hereditary syphilis is sometimes transmitted and sometimes fails to be transmitted, there must be some reason for it, because in nature nothing can exist without a cause. What are these reasons? This is the next point to be studied by us.

We may say right here, that we do not know all the causes of these eccentricities of hereditary syphilis. Bnt, even if we do not know all, we know some of them and it behooves us to explain what we do know of them.

One great point dominates this question; it is with respect to the age of syphilis. If, some time ago, you had interrogated almost any physician on this subject, he would most certainly have responded that tertiary syphilis is not transmissible. This bold assertion rests upon a well established fact. It is absolutely true that time is a corrective; that it lessens, attenuates and even does away with hereditary syphilis; and we could collect a great number of witnesses supporting this proposition, which would all demonstrate the influence of time on the disease.

Three of my syphilitic patients, who were not treated in the beginning of their disease, have all healthy children. They were however, married respectively five, six and eleven years after the initial chancre. The influence of time shows itself thus.

Hereditary syphilis at first kills the child in the beginning of gestation; then at eight or nine months; then the child is born but not viable, nearly moribound; then the child is born syphilitic but dies soon; then it is born syphilitic but has power enough to live and finally the child is born healthy.

Example: A syphilitic physician treats himself for six months and then marries a healthy woman who becomes pregnant eleven times. The two first were terminated by still-born children; the third and fourth by the birth of syphilitic childen who soon died; the remaining seven, by the birth of syphilitic children, who lived.

The same attenuation is produced by time in heredity from mixed origin and a great number of observations, proving this, have been collected by Diday, Berger and others.

Observation furnished to Mireur (of Marseilles): A young syhilitic stonemason is married in the beginning of the secondary period and infects his young wife. The two young people are not treated, and eight pregnancies take place. In the first, abortion at five months; in the second, at seven months; for the third, premature labor and birth of a dead child; in the fourth and fifth, the children are born at term, are syphilitic and die re-

spectively in thirty and forty-eight days; the sixth, seventh and eighth are ended by the birth of sound children which live.

These are eloquent facts, which need no comment, and we draw the conclusion from them that time diminishes the influence of syphilis, regarding heredity. These facts being admitted in principle, can we go still further and determine in a more precise manner the influence which time exerts upon the heredity of syphilis? I think so, and the study of a great number of observations has furnished me with three propositions, which we even may designate as laws:

1. That hereditary syphilis is nearly always produced in that period which corresponds to the three first years after the infection of syphilis.

2. That the maximum of this maximum, if I may express myself in this way, responds to the first period of the disease, i. e., the first year.

2. That after the first three years of the disease, the progress in the decrease of the influence of hereditary syphilis is incomparably less rapid.

These propositions are deducd from the information embraced in these figures; 239 pregnancies, the records of which I have collected, have furnished 178 deaths, and the following table will show you the distribution of these deaths:

Mortality caused by hereditary syphilis, at various ages of the disease, after 239 observations.

Year After the Infection of the Parent.		Year After the Infection of the Parent.	
1	88	8	5
2	36	9	1
3	1[illegible]	10	1
4	7	11	2
5	5	12	3
6	6	13	1
7	5	20	1

Now let us analyze this table; what do we find? That in the first three years after infection of the parent, four.fifths of all the deaths occurred. In the first year, 88 children died, more than one-half of the total mortality; in the second year, there are two-thirds less deaths then in the first; in the third year, one-half of the number of cases noticed in the second; in the fourth year, not even one-half of that of the third year is reached. After the fourth year, the decrease in the death rate is lessened considerably; the remaining figures are of less interest to us.

Thus we find that there is in syphilis an eminently dangerous period regarding hereditary consequences, and that this period extends over the first three years after the infection of the parents. We find further, that it is mainly during secondary syphilis, that the danger is excessive, and that the maximum of the danger corresponds to the first year of the disease, the first six months after infection. The first year of syphilis may be called "the terrible," because then, syphilis kills the children.

It is the terrible year, and I will prove it by my own observations: 90 women were infected by their husbands, and became pregnant in the first year after infection. There were 50 abortions and 38 children were born, but only two living. Two living children and 38 deaths out of 90 pregnancies!

And what is more, gentlemen, these figures are not taken from the hospitals, nor from the slums, but they are taken from the midst of the better classes, and even from aristocratic families, from a source essentially favorable to the normal development of pregnancy. What a lession for those who want to marry in the first year after infection with the disease!

Let us now study another question. Is there a time in the course of syphilis,when syphilis is not transmissible. And if so, when does this exist?

On this point, we cannot give a positive answer; all I cay say regarding this, is, that there is a time when syphilis is no longer hereditary; but this is as far as I can express myself.

Two facts are nevertheless known, the one favorable and the other one not so.

The first is, that after a number of years, when the syphilis grows old, the tendency to heredity is diminished to such an extent as to be almost nil.

Observations are abundant, in private life as well as in hospitals, where syphilitic men, who were not treated, got married in the sixth, eighth, tenth, or twelfth year after acquiring syphilis, and had healthy children.

Time will therefore exhaust the hereditary transmissibility of syphilis.

The unfavorable part is the following: Even in the most advanced state of syphilis, the disease may be transmitted to the offspring. It is rare, but nevertheless authenticated.

The wide spread belief that tertiary syphilis is not hereditary, is a positive error. It is an error, founded on a great deal of truth, but it is nevertheless an error. Syphilis is undoubtedly exhausted and its transmissibility deminished,but does the ability to transmit the disease disappear after the secondary period of its existence? Clinical experience shows us that it does not. There exists a number of cases in which syphilis was transmitted in the tertiary period of the disease, in the sixth, eighth, tenth, twelfth and even in the twentieth year after it was contracted. The following are some of the cases:

One of my patients was infected with syphilis in 1873. He married in 1883 and had a syphilitic child. Hutchinson has also observed the transmission after ten years; among others that parents, both of which were infected for fifteen years, gave birth to a sypilitic child.

Abortions, so numerous and common in syphilitic families, can also furnish us proofs. Men, who marry at an advanced period of the disease, have the misfortune to see their wives abort. All accoucheurs can relate facts of this kind. One of my patients was married in the seventh year after acquiring syphilis; his wife was pregnant three times, and each pregnancy was termin-

ated by abortion. Another patient married a healthy woman in the ninth year of the disease, and three pregnancies resulting from this union resulted in abortion.

A physician, infected by syphilis, treated himself for six months. Later on he married a healthy woman, who was impregnated by him three times, in the eighth, tenth and twelfth year of the husband's disease; she aborted every time. This physician was advised to continue his treatment, which he did, and the two following pregnancies were terminated by the birth at term of healthy children.

To resume: A syphilitic man, in the eighth, tenth or twelfth year of his disease, may have syphilitic children. Tertiary syphilis is therefore transmissible.

In another order of cases, we find hereditary syphilis transmitted in a series for a great number of years. The repetition of the same result also furnishes us with undeniable proofs.

A lady, infected by her husband, has ten pregnancies. Nine are terminated by abortion at two to seven months; the last by the birth of a syphilitic child. At the conception of the last child, it was sixteen years since the infection of the mother.

A syphilitic woman is impregnated eleven times and has eleven still-born children; in the fourteenth year of her disease, she gave birth to a syphilitic child.

I could cite to you many more cases of this kind.

From all this we may say, that there exists what we we may call hereditary syphilis at long term, and that consequently hereditary syphilis may be transmitted in the tertiary period of the desease.

These are the results in general. I have tried to be more accurate still, and the following table will show you the results which I have obtained to the end of the sixteenth year, relating the cases of syphilitic infection of the child, abortion, and death by para-syphilitic affections, all of which are manifestations of hereditary syphilis.

Years.	Syphilitic infection of the child.	Abortion.	Death by para-syphilitic affection.	Total.
6	8	12	4	24
7	3	7	9	19
8	1	7	2	10
9	1	8	2	11
10	2	4	1	7
11	1	4	0	5
12	0	3	1	4
13	0	3	1	4
14	0	2	1	3
15	2	1	0	3
16	1	1	0	2
17	0	1	0	1
19	1	0	1	2

This table is based upon 562 cases, which have furnished 10 per cent of hereditary syphilis at long term; i. e. out of ten cases of hereditary syphilis, one is derived from the tertiary period (verole ancienne) of the disease.

Up to what age of the disease is its hereditary influence exerted?

Personally, I have seen it manifested at fifteen and sixteen years after the initial sore; after this time, I cannot absolutely declare myself in the affirmative; though one of my assistant physicians reported a case, where hereditary syphilis was transmitted eighteen years after the infection of the disease. Other authors have also reported the transmission of the disease after very long periods from the time of the initial leson. Campbell has seen hereditary syphilis produced in the seventeenth year; Weil and Henoch in the twentieth. Although these are exceptional and rare cases, they exist nevertheless, and prove that the power of begetting syphilis extends far into the tertiary period of the disease.

We must carefully note this conclusion, because it is of practical importance. We must not cease to combat the dread disease, and we should not give our sanction to marriages based only on a consideration of its age; it is necessary always to require other guarantees, of which treatment of the disease is the first of all.

Inhalations of Hydrofluoric Acid in Phthisis.—Dr. Ludwig Polyak (*Occidental Med. Jour.*) says he has been using inhalations of hydrofluric acid in phthisis. He employed an apparatus especially constructed according to the directions of Yager. Five patients used the apparatus simultaneously, inhaling for an hour. During the first *seances* fifty liters of the acid were inhaled by each patient at one time. Later the quantity was gradually augmented to from 500 to 600 liters of air saturated with acid. The solution was at first prepared according to Yager's prescription, but this was abandoned, as the quantity of acid in the air was too small. Dr. Polyak modified the mixture and succeeded in obtaining a constant percentage of acid. Only patients in whose expectoration the tubercle baccillus was found were chosen for these experiments. They complained at first of burning and sticking pains in the eyes, and of pains still more severe in the nose and pharynx. The same pains were also observed in the breast. These disappeared only to reappear when the quantity of the acid had been greatly increased. All patients complained of headaches, and sleeplessness. In one case epistaxis regularly occurred after each inhalation, but only during the first *seance*. In another bloody expectoration, and in a third, a slight degree of hemoptysis was observed. During the treatment cough and expectoration were augmented. From 46 to 50 *seances* were employed. Dr. Polyak concludes: (1) The number of the bacilli in the expectoration was increased. (2) The pulmonary condition became worse, and in the two cases extensive softening developed. (3) The weight decreased in four cases from ½ to 3 kilogrammes; in one case increased by ½ a kilogramme, but the other symptoms had become aggravated. (4) In two cases only was the temperature elevated before treatment; during the inhalations it was considerably increased. (5) In four cases the vital capacity decreased by from 100 to 600 centimeters. In one instance it increased 100 cubic centimeters, though the disease had made steady progress. (6) The treatment is objectionable in any case, as the patient is compelled to remain for a long time in a small confined room, the atmosphere of which is not in accordance with hygienic conditions. It is therefore evident that this method, while without any good affect, is also injurious.—*Am. Lancet.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,

EDITOR.

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SATURDAY, AUGUST 31, 1889.

MUST WE GIVE UP THE USE OF OUR NEWLY-ACQUIRED ANTIPYRETICS?

At the International Therapeutical Congress, recently held at Paris, the question was raised as to the advisability of giving antipyretics in the continued fevers, and they were objected to by some of the profoundest students of therapeutics in the assembly. Semmola declared emphatically that he believed their free administration really produced a poisonous, rather than a beneficent effect; that a patient under their influence experienced a sort of repose, but this repose was secured at the expense of vital force and strength.

While partaking, to a certain extent, of the spirit from which this view emanated, we hasten to declare ourselves most decidedly as not endorsing the expression quoted.

This is the declaration of an extremist. Extremists are wrong nine times out of ten. To say that sedative antipyretics should never be prescribed, either in burning typhoids or asthemic pneumonias—in fact without any qualification at all, is almost absurd.

There are indications and counter-indications to be taken into consideration in all such questions. Such wonderfully effective medicines as these cannot be condemned and dismissed by one broad assertion, no matter how great the authority of him who makes it.

Two questions present themselves for discussion:

1. Shall we, in a given case of typhoid fever, use the antipyretics or not?

2. If so, which shall we use?

To answer the first of these we must first of all consider the type of the affection with which we have to deal. There are many cases of typhoid fever or pneumonia or remittent fever which are of a sluggish, asthenic character, which do not invite the use of antipyretics in any form; there would be nothing to gain by giving sedatives to a quiet patient, antithermics to one who had little fever. But on the other hand, suppose our patient is one, full-blooded and active, irritable and restless, turning and throwing himself about in his bed, constantly increasing his already elevated temperature until the 104 mark is the lowest that we may hope for in the whole day. Hydrotherapy is tried and gives temporary benefit; the temperature remains partially reduced while the baths are continued, but immediately on their discontinuance, it goes up like a kite in a brisk breeze. And few patients enjoy the prolonged application of the wet pack; indeed most of them complain bitterly of it, shiver and declare they are already too cold.

Give such a patient a suitable dose of the antipyretic applicable to his case and in all probability he will bless you in his dreams a half hour later.

But we must acknowledge that the argument on this side of the question has not everything in its favor. The remedy which has just served you in so charming a manner may require a repetition after a few hours; and again, in a shorter time; and yet again, with an increase in the size of the dose. You begin to feel doubtful as to whether it is doing the service that its first effect had led you to expect of it. And when it ceases altogether to have any beneficial influence, your conclusion is not long delayed.

But what shall you do next? The simplest thing in the world: Try some other of the tar-group. It is a singular fact that notwithstanding the approximate similarity of these medicines and of their effects, they are not by any means equally efficacious in all cases. Many times have we seen antipyrine fail to show any but the very slightest and most transient influence on the temperature, after which antifebrine given in only moderate doses, would make itself manifest in a surprisingly short time. And again, a recent case of typhoid fever formed for us an instructive lesson: At our first examination (a week after the beginning of the illness) the temperature was 104° and the patient was suffering exceedingly from headache and backache; could not remain in one position two minutes at a time. Sleep was out of the question. Antifebrine was given at first, as is our custom in moderate doses; it procured distinct amelioration of the symptoms mentioned. Two or three days later, however, it apparently lost its power for good, and notwithstanding the conjoined use of frequently repeated cold sponge baths (other means of applying water being inexpedient) in order to keep the temperature within safe bounds, it was necessary to give so much of the drug that the bounds of safety were shown to be traversed in another direction; recurring cyanosis and spells of weakness called attention to the cardiac depression which it was causing. Phenacetine was then substituted for the antifebrine, with a response that may be described as being fairly beautiful. Five grains given only every four or six hours, was quite capable of holding the temperature between 101° and 102½° Fah., and no anoying depression, cyanosis or other like phenomena de-

tracted from its favorable influence. On the contrary, the patient felt stronger, slept and rested better and was more content in every way.

We believe that where the tar-group of antipyretics do not act favorably in lowering the temperture, but instead, cause cynosis, dyspnœa and a feeling of weakness, most assuredly they are doing harm and their administration should be stopped. But with the variety of them that recent laboratory work has furnished us, it is very probable that we will find one at least which will serve us well.

As to the question of which shall we use, there are some general rules which may be followed—until they are found not to apply in certain cases. For the relief of pains, aches etc., of a neuralgic character, antipyrine in full doses, will probably be the most efficient. Sometimes antifebrine is quite as capable of affording the same effects, but this is not usual.

Antipyrine is more successful in lowering the temperature of children than of adults. With adults it seems to have but little power in this direction. Cardiac oppression, palpatation, a general feeling of weakness and free perspiration are not unfrequently produced by it.

Antifebrine is nearly always reliable as an antithermic; seldom causes the depressive symptoms mentioned, unless given in does that are much larger than necessary. The sweats that it causes accelerate to a marked extent, its antipyretic influence.

This fact may be utilized; by favoring diaphoresis by giving warm drinks, keeping the patient covered, or giving a hot bath, much less of the drug will be found necessary to accomplish the same end.

The small cost of antifebrine is an item to be considered in making the choice; its tastelessness also.

Phenacetine is more expensive, not disagreeable in taste, reliable as an antithermic, with less power as an anti-neuralgic. It does not produce so much depression, and we have noticed no sweats following its use. Indeed, in one patient who had been suffering from night sweats, they gave him no more trouble after phenacetine was prescribed.

We believe that it is a rule which is applicable to the great majority of cases, that these drugs, especially antifebrine, are given in too large doses. Not long since a Western physician reported to the *Times and Register*, of Philadelphia, an instance where he gave a child five grains of antifebrine, (a maximum dose for an adult!) and was surprised because shortly afterward his services were needed to resuscitate the child from impending death.

Small doses, repeated as indicated by the tempera ture, give much more satisfactory results.

Mississippi Valley Medical Association.

The titles of nearly one hundred papers have been received for the programme of the meeting to be held at Evansville, Ind., Sept. 10, 11 and 12. This argues that there will be six or eight hundred physicians in attendance.

Those who will attend are advised to take a receipt for full fare going, that return tickets may be secured at one-third fare.

Rules for the Treatment of Sciatica with Electricity.

Dr. Max Weiss, of Vienna, gives the following directions for the treatment of sciatica with electricity:

1. The anode (positive) is placed on the ischiatic region, the cathode over the different painful points; application stabile, for 3 to 6 minutes.
2. The anode on the different painful points, the cathode over the the point of exit of the sciatic nerve.
3. One electrode is placed in the rectum, the other over the sacrum.
4. The application for many hours, even a day at a time, of a plate of copper, covered with flannel, over the sciatic region while a plate of zinc connected to the first by a metallic cord, rests on the posterior, superior or inferior surface of the thigh.
5. The different segments of the nerve (sciatic), from six to twelve inches in length, are treated successively from the sacrum to the foot, with the continuous current.
6. The faradic brush is applied throughout the whole extent of the posterior aspect of the member, after which stabile galvanization for ten minutes.—*Cent. f. die ges. Therap.*

Electrical Treatment of Writer's Cramp.

L. Danion, in advocating the employment of both galvanic and faradic currents in this inveterate affection, recalls the theory of its origin as given by Duchenne, after a long study of the subject; that, properly speaking, the affection classed under that appellation is not always a cramp; that it is sometimes nothing but a trembling, or simply a functional impotence, and for this reason he designates certain cases, functional spasm, and others, functional muscular impotence. Whatever the difference in the forms of the affection, it is always provoked by an abuse of writing, conjoined with a natural predisposition toward such manifestations on the part of the person affected.

In opposition to the gloomy prognosis usually attributed to this disease, Danion claims to have had many favorable results from persistent treatment after the plan illustrated by the following case: A man of excellent general health observed a progressive increase in difficulty with his hand for five months. After writing three or four words, his fingers would cramp up, a feeling of intense fatigue would spread throughout the forearm, and if he would attempt to continue, he would

tremble and soon find it impossible to write anything at all legible.

Applications of the continuous stabile current were made, one pole (the positive) to the back of the neck, the other to a ring encircling the thumb, the strength being increased gradually from 25 to 40 m. amp. during 7 or 8 minutes, combined with the labile current over the surface of the forearm for 3 or 4 minutes. Later, with some energetic contractions of the muscles of the forearm, there was observed a definite amelioration at the end of 12 or 15 seances, but, notwithstanding continuation of the treatment for 18 days, it rested stationary at this stage of improvement. Then static electricity was combined with the continuous currents; the improvement began anew and made rapid strides. Next the continuous currents were suspended for a time and replaced by local cold douches in strong jets, the object being to produce a sort of hydraulic massage.

Two months had hardly passed when the young man could write 10 hours a day, and even went so far as to write 17 or 18 hours a day in order to finish some work that was pressing.

Twenty seances were yet given during about two months, in order to finish the cure, which has endured for four years.

MEDICAL ITEMS.

Lethal Dose of Electricity.—Edison says that 1000 volts of electricity will surely cause death.

Dr. F. W. McRae has assumed the management of that most estimable journal, the *Atlanta Medical and Surgical Journal.*

A Case from Practice.—Semi-Literary Patient (who is just about to receive a hypodermic of morphine): "Doctor, don't give me none of that Exile of Life!"

Suspension for Chronic Meningomyelitis:—Prof. De Renzi, of Italy, reports the cure of a case of chronic meningo-myelitis of a years standing, with the suspension method.

Two Female Physicians died suddenly on the same morning at Troy, New York, on Aug. 19th., one from an overdose of some "heart tonic," the other from a cause unknown.

The American Microscopical Society held its annual meeting during the last week at Buffalo, New York. Over 300 microscopes were brought into use in illustrating specimens.

A Submarine Expedition.—It is said that an expedition will shortly start from Kiel, Germany, to explore the submarine flora and fauna of the ocean, under the supervision of Dr. Hensen. The expedition, which is to last for several months, has been subsidized by the Emperor William to the amount of 80,000 marks. A special subject of investigation will be the effect of light on the oceanic fauna, and Dr. Henson, it is understood, will undertake a series of experiments with this object by means of a novel application of the electric light.

A Young Giantess.—The latest European wonder is an eleven-year-old Austrian girl who is over six feet tall and weighs 300 pounds. It is said that she grew more than a foot in one year.

Picnic Ice Cream.—Another wholesale poisoning from picnic ice cream is reported, this time from St. Paul. About 100 persons were made desperately ill. No deaths are so far known to have occurred in consequence.

A Long Fast.—Robert Marvel, an octogenarian of the neighborhood of Indianapolis, is believed to have fasted for the last 70 days, having taken nothing but water during that time. He has lain in a stupor and has not spoken since June 14th.

An Antidote for Carbolic Poisoning.—The *Rev. de Therap. Med. Chir.* says that common soap is an efficient antidote for carbolic acid poisoning. It should be given as soon as possible after the injection of the poison, and continued as long as any toxic symptoms are manifested.

Death of Dr. Mott.—Dr. Alex. B. Mott, Professor of Clinical and Operative Surgery in Bellevue Medical College, died of pneumonia, after a brief illness. Dr. Mott was born in 1826. He was one of the original members of the faculty of Bellevue Hospital Medical College. He leaves one son, Dr. Valentine Mott.

Brokaw's Rings.—The contribution of Dr. A. V. L. Brokaw in the Review of Aug. 17th, on the subject of Intestinal Anastomosis has attracted much attention, and the suggestions and devices for improving the technique of intestinal surgery therein presented, have met with the hearty approval of all who have read it.

Dr. Brokaw is now using a segmented, instead of a continuous, rubber ring, $^1/_8$ inch in diameter. This admits of even greater surety and facility of evacuation after the catgut within it has been absorbed.

Dr. L. McLane Tiffany did a bold and curious operation recently. A man, æt, 56 years, had been treated for several years for supposed catarrh of the bladder. Dr. Tiffany washed out the bladder and found a stone. An examination of the urine and a tenderness in the region of the left kidney both suggested a pyelo-nephritis. He put the man on his face, cut, and found an abscess of the kidney, then turned him over on his back

at the same sitting, cut and removed the stone in the bladder. The operation was done a month ago, and the man is well.—*Maryland Med. Jour.*

Treatment of Flatulent Dyspepsia.—Dujardin-Beaumetz reports, in the *Jour. de Med.*, that he has had remarkably good results in the treatment of flatulent dyspepsia due to secondary gastric and intestinal fermentations, and also cases of chronic gastric distention, by the administration of beta-naphthol, after the following formula:

℞ Beta-naphthol, ... ʒ ijss.
Bismuth salicylate, . . . ʒ ijss.
Magnesium carbonate, . . ʒ ijss.

Mix and divide into 30 capsules, one of which is to be taken before every meal.

Menthol in Pruritus.—It is said that nothing is more efficacious in many painfully itching skin affections than menthol. *L'Bul. Med.* gives the following as pleasant formulæ:

TINCTURE.

℞ Menthol, . . . gr. xv to gr. xlv.
Alcohol, ... ℥ji.

LINIMENT.

℞ Menthol, . . . gr. xlv to ℥ijss.
Ol. olivæ,
Lanolin . . . . aa ʒi.

POMMADE.

℞ Menthol, ... gr. xlv.
Balsam Peru, ... ʒj.
Lanolin, ... ʒiij.

Stuttering.—It is a well known fact that stutterers, when speaking in a whispering voice, show no impediment of speech. This fact has been turned to account by Coen. His method of treatment is as follows: In the first ten days speaking is prohibited. This will allow rest to the voice and the apparatus concerned in articulation, and constitues the preliminary stage of treatment. During the next ten days speaking is permissible in the whispering voice, and in the course of the next fifteen days the ordinary conversational tone may be gradually employed.—*Annals of Hygiene.*

Cardiopathic Dyspnea.—Dr. Henry Huchard presented to the Societe de Therapeutique some considerations with reference to his investigations into the pathogeny of arterio-cardiopathic dyspnea. He concluded that there were two kinds of dyspnea, one frankly cardiac, due to failure of compensation of the heart, induced by interference with the cardio-pulmonary circulation, for which cardiac tonics, and especially digitalis, are indicated. The other, of toxic origin, due to a state of impermeability of the kidney, to counteract which an alimentary regime is particularly necessary. Digitalis should not be prescribed in such cases because it is capable of producing just those complications that it is supposed to combat.

The Pathogeny of Duodenal Ulcer, as a Result of Severe Burns.—Woakes, in writing on the correllating and reflex functions of the sympathetic system, says that "no better instance of this sort of reflex action, so distributed as to constitute a correllated tissue tract, can be afforded than is seen when burns of the chest are followed by a duodenal ulcer. Here the afferent sympathetic fibrillæ, associated with the injured cutaneous spinal nerves implicated in the burnt area, are in reflex relationship, through their ganglion, with the nervi vasorum of the arteries supplying the duodenal mucous membrance, though the evidence in this case goes to show that the impulse is in its issue one of vessel contraction rather than of dilatation, the resulting ulcer being a tissue necrosis, the sequence of starvation from this reflexly-excited obliteration of its blood supply."

Ignipuncture of the Tonsils.—Dr. Wilhelm Roth, of Fluntern, finds that in order to reduce the size of the tonsils without risk of troublesome hemorrhage, which is not uncommon, especially in young subjects, the best plan is to employ ignipuncture, as has been recommended by Kirshaber, and more recently by Verneuil. The tonsils and neighboring parts are first brushed over with a ten to twenty per cent solution of cocaine. The finest point of the thermo-cautery, heated to redness, is then inserted to a depth of about five millimetres in three or four spots a few millimetres apart from one another on the tonsils. The instrument is not allowed to remain more than one or two seconds in the tissue. The whole operation, including both tonsils, can be performed in a very few minutes without any bleeding and with scarcely any pain. It must be repeated four or five times at intervals of two or three days, and this is usually sufficient to cause the tonsils to return to their ordinary condition.—*Lancet*

Methylic Chloroform and Bichloride of Methylene in Anesthesia.—M. Polaillon communicated to the Academy of Medicine the results of his experience with methylic chloroform. He had arrived at the conclusion that although it might replace the ordinary chloroform with advantage in women, it was not so with men, on whom the anesthetic effect of methylic chloroform was sometimes very slow and sometimes even nil.

M. Leon Lefort took occasion to relate his experience with the anesthetic of Sir Spencer Wells, employed in England under the name of bichloride of methylene, and which he had decided to use because of the impurity of the chloroform commonly in use. He had employed the methylene for six years and had never observed any serious accidents. Sleep is induced a little more slowly, but it is profound, and the patient does not remain in the state of agitation sometimes noticed with chloroform.

As to menthylic chloroform, it had never given him satisfaction.

PROGRESS OF THE METRIC SYSTEM.—At a recent meeting of the French Academy of Science, M. de Malarce, speaking of the extension of the metric system of weights and measures, made the astounding statement that only about 42,000,000 of inhabitants of the civilized world have systems which are neither metric nor decimal. In 1887 the aggregated population of the countries in which the metric system was compulsory was over 302,000,000, being an increase of 53,000,000 in ten years. In 1887, in countries with a population close on to 97,000,000, the use of the system was optional; and the countries where the metric system is legally admitted in principle and partially applied (as in Russia, Turkey and British India) had in 1887 a population of 395,000,000, being an increase of 54,000,000 in ten years. The increase is due to the growth of population in the countries which had already adopted the system, and to its adoption by new countries. The systems of China, Japan and Mexico are decimal, but not metric. The metric system is thus legally recognized by 794,000,000 of people, and the population of the three last named countries is 474,000,000.—*Nat. Drug.*

A GREAT WORK.—The following cablegramm to one of the dalies from London is interesting: The government is in receipt of an official communication from the State Department at Washington inviting the co-operation of England in taking measures to prevent the spread of infectious diseases. The same communication, it is understood, has been sent to other European powers and contains a proposal that well-known plague centres, liable from their commercial relations with the world to diffuse the germs of cholera, yellow fever and similar pests, shall be declared obnoxious to humanity, and the governments in whose territory they are situated shall be called on to cleanse them to the satisfaction of an international commission appointed to regularly inspect them. Though the object sought to be accomplished is conceded here to be a praiseworthy one it is thought the United States authorities have underestimated the difficulties in the way of carrying out such a reform. In addition to many Asian ports and the cities on the Southern Mediterranean Litoral,several West Indian ports must be included in the list of objectionable places. Prejudices, ignorance and national pride, generally strongest among the filthiest nations, will have to be combated. Lord Salisbury says that England will do all in her power for the furtherance of such an object. To suggest to Turkey and Egypt to cleanse and remodel Constantinople, Smyrna and other cities would be regarded as an insult and a covert menace to moslem traditions and religion. Havana too may be, as stated, a standing source of danger to the United States, but to order the nuisance abated would be considered in Spain as equivalent to ordering every hidalgo to wash his feet.

WHERE SICKNESS COMES CHEAP.—Russia has fixed doctors' charges. Physicians making $450 per year will get 45 cents per visit; others 25 cents. In country towns 10 cents is the usual charge.

BOOKS AND PAMPHLETS RECEIVED.

Accumulators and their Medical Use. By Robert Newman, M.D. Reprinted from the "Philadelphia Med. Times," April 15, 1889.

The Annual Report of the Department for the Insane of the Pennsylvania Hospital, 1889.

An Ephemeris of Materia Medica, Pharmacy, Therapeutics and Collateral Information. July, 1889. By E. R. Squibb, M.D., E. H. Squibb, S.B., M.D. and Chas. F. Squibb, A.B.

Announcement and Catalogue of the Hospital College of Medicine, Louisville, Ky.

Seventeenth Annual Announcement of the Physio-Medical College of Indiana, Indianapolis, Ind.

Announcement of the Gross Medical College, of Denver, Col. 1889–90.

Prospectus of the St. Louis College of Pharmacy, 24th session.

Seventeenth Annual Announcement and Catalogue of the Boston University School of Medicine.

Wood's Medical and Surgical Monographs, Vol. 3, No. 2, August, 1889.

The Treatment of Syphilis at the Present Time. By Dr. Maximilian von Zeissl.

The Treatment of Inebriety in the Higher and Educated Classes. By Dr. James Stewart, B.A.

Manual of Hypodermic Medication. By Drs. Bourneville and Bricon.

Electrical Distribution of Light, Heat and Power. By Harold P. Brown, Electrical Engineer, New York.

Address on, and Legislative Control of, Dangerous Electrical Currents. By John Murray Mitchell, New York.

Death from Electrical Currents; Some Experiments. "New York Star."

Sixth Annual Announcement of the Medical and Dental Departments of the National University, Washington, D.C.

Thirtieth Annual Announcement and Catalogue of the Hahnemann Medical College and Hospital, Chicago, Ill.

The Etiology, Pathology and Operative Treatment of Rachitic Deformity. By Chales N. Dixon Jones, B.S., M.D. Reprint from "Annals of Surgery."

Transactions of the Illinois State Medical Society, 1889.

Lectures on Obstetric Nursing. By Theophilus Parvin, M.D., Prof. of Obstetrics and Diseases of Women and Childred at Jefferson Medical College; Obstetrician to the Philadelphia Hospital. 1889. P. Blakiston, Son & Co., Philadelphia.

CORRESPONDENCE.

FOREIGN LETTER.

Dear Dr. Bond.—Leaving New York on May 22, we landed safely at the quaint old city of Antwerp, in Belgium, June 3, after a voyage of 12 days. While viewing the museums and galleries of Belgium and Holland, which contain priceless treasures of the works of the old masters, I also took occasion to visit some of the principal hospitals and kliniks. One of the finest hospitals I saw in Belgium or Holland is the new Van Stuvenburg Hospital in Antwerp, built on the pavilion plan. The hospital covers about two squares. Each pavilion is circular in form, two stories high, and connected by covered corridors. The corridors are light and airy. The circular wards have air and light from all sides. In the center of each ward is the nurses' station which facilitates a view of the ward. There are twenty wards of twenty-six beds each, making a total of 520 beds. There is also a chapel separate from the buildings, in which funeral services are held. All the buildings are of red brick with slate covered hip roofs.

One of the special features of this hospital is the bathing and culinary departments.

The bath-room is a large room in which water can be applied to the body in all forms and manners. Thus there are appliances for Russian and Turkish baths, and from the walls and floors are plugs in various heights and various angles for applying douches or sprays to the head, chest, shoulders, abdomen, spine and perineum.

Then there is also the means of giving electric baths. All in all it is the best appointed hospital bath-room I have thus far seen.

The kitchen also is a model of cleanliness, and its appointments are very complete. The floors are of cement, and every thing scrupulously clean. No kitchen odor (which hospital kitchens are very liable to have). Then there are huge kettles with double jackets, between which steam is admitted, by which the cooking is done. These huge kettles are so arranged that they can be emptied by tilting, by turning a wheel connected with the pivots on which each kettle swings. The Sisters in charge are very proud of their kitchen and justly so, for it is certainly a model of its kind.

Leyden, whose University is one of the oldest in Europe, was the next point which I visited, and where I took occasion to look at the hospitals. Prof. Ittersen kindly invited me to meet him at the Hopital Wallons, a private hospital under his control, which contains about 30 beds. Although a comparatively small hospital I soon learned that there was quite an amount of material, as the Professor afterward told me, patients came here and to the Ryks Hospital from the provinces tributary to Leyden.

Among the cases shown was a case of double-sided removal of tuberculous glands, in which wounds were tamponned and secondary sutures were employed. Union taking place by first intention. Case of resection of femur for ununited fracture in a patient, æt. 47 years; also a case of carcinoma of penis in which amputa- had been performed; a case of sectio alta six days after operation was shown in which the wound in bladder was sutured; external wound healed, the only thing patient complained of was incontinence of urine due to temporary paralysis of sphincter from the catheter which had been kept in the bladder.

A case of liver abscess which had been incised laterally and drained; the drain way removed of this dressing.

A case of much interest was one of fracture of the patella, in which the plan of treatment was that of massage, after the method of Metzer, of Amsterdam, now of Wiesbaden, and who, by the way, is doing a land office business in the department in which he has developed—massage. The method is about as follows:

After the third or fourth day, massage of the limb is begun, with passive motion of the joint; the treatment is repeated day by day to the end of cure, 3 to 6 weeks; in the time between the seances the limb is kept quiet on a posterior splint. Of course, under this method the union is ligamentous, and it is claimed that it is of more importance to keep the muscular apparatus in healthy condition than that bony union should take place, which latter is of rare occurrence.

Although using the patella was at first supposed to be the ideal mode of treatment, the practical results have on the whole not been what was expected, and, therefore, there is room for further improvement in the means of treatment. I was shown at the Ryks' Hospital a case of fracture of the patella where 1½ year had passed since its occurrance; it had been treated by massage. I found that the ligamentous union between the upper and lower fragments was at least four inches, yet the man could walk, run and jump without a limp, and could fully extend and flex the leg, and it evidently was as strong as the other leg. In this case there was nothing to wish for as far as practical results were concerned, for the restoration of physiological function is one of the aims of surgery. In all other forms of treatment where bony union is aimed at, there is quite a degeneration of the muscles of the thigh on account of immobilization and the patients are very slow in getting the use of the limb, such as it is.

If all cases would result as the one shown me I should say this is the ideal method.

The Ryks' Hospital to which Prof. Ittersen kindly took me, contains 200 to 300 beds. In front of the hospital is a bronze statue of Boerhave, whose fame in medicine has been handed down to us. There was at the time of my visit, nothing of great interest here. One case in which a plastic operation for restoration of the under lip had been done was interesting from the fact that a degeneration (kelord) of the scar tissue had taken place, leaving ugly looking ridges in the face, and for which there was not much to be done. A case

of lack of development of the left tibia in its long axis in a young child, was also interesting. Here was shown me also a case of resection of the ribs which certainly had been done heroically. The whole right side was sunken in a space 6 by 4 inches, presented a cavity at the bottom of which was the right nipple. Into this cavity you could lay your two fists. At the bottom of the cavity could be seen the apex beat of the heart, as the skin at bottom of the cavity was in direct contact with right wall of mediastinum. The resection had been done for suppurative pleuritis. The patient seemed well in spite of the extensive breach in his chest-wall. The House Surgeon very kindly gave me a photograph of this case.

Right here in Holland I was confronted with what I had read and heard of, viz., the prevalence of tuberculous conditions of bones in Europe. In the Ryks' Hospital almost every other bed contained a patient with some form of tubercular bone disease. Now, in our public hospitals even in those wards which are filled mosty with paupers,this condition is comparatively rare.

One of the features of the Ryks' Hospital at Leyden is the new building devoted to pathological work and which contains the Boerhave Museum of pathological specimens. A fine collection of dry and wet specimens.

This building is a thing of beauty, built in pure Holland style, its interior decorated with tiles and colored bricks very tastefully arranged. In the building there are rooms for bacteriological cultivations,for microscopical study and an autopsy room; and a room for hardening specimens, also rooms for keeping cadavers.

The Burger Hospital at Amsterdam was my next objective point. This hospital is very large and old, containing 300 beds. There is in process of erection a new wing to contain 240 beds.

There is much to be wished for in the appointments of the old part. The beds being old, wooden, tumbledown affairs, in which real cleanliness was out of the question. Floors and walls also in poor condition, but then Amsterdam is a progressive and wealthy city and in time this will all be changed. The surgical department of this hospital is under the direction of Professor Tilanus, whom I did not meet, but the House Surgeon very kindly showed me about. Here there were in a row 3 cases of fracture of the femur in young children, ranging from 17 months to 3 years. They were being treated as described in my letter from New York, by the perpendicular suspension of the limb at right angles to the trunk. The coincidence was rather amusing to see 3 little ones in a row thus suspended.

I was also shown a case in which operation for stone had been done in sectio alta ; no suturing of the viscus: this patient was also doing well. This operation, sectio alta, is looked upon with much favor here; I will consider it more extensively in my next letter.

From Amsterdam I went to Utrecht, the scene of the labors of the renowned physiologist and teacher and author in ophthalmology, the late lamented Prof. Donders.

As examinations were going on, and as there was not much to be seen, I took a stroll through the hospital, but saw nothing of much interest. The hospital is nice and airy, every thing very clean, with large grounds surrouding the buildings.

Professor Donders established a private hospital for diseases of the eye, but I did not visit it. Having now seen what I wanted to in Holland and Belgium, I go from here to the Rhine, and in my next letter will tell what I saw in the hospitals of Coelin, Bonn, etc.

A. H. Meisenbach, M. D.

SELECTIONS.

DR. LOOMIS' REPORT ON THE BROWN-SEQUARD METHOD.

The *Medical Record*, of Aug. 31, published a report on the exilir of Brown Sequard under the title of "An Experimental Study of the Brown-Sequard Theory." The report is from Dr. Henry P. Loomis, who thus makes public the results of the experiments conducted in this city under his direction.

Dr. Loomis points out that there is nothing in Brown-Sequard's own account of his own experiments to support the accusation that he claims to have discovered the source of perpetual youth, but rather a flat denial of any such contention. He recognized the danger of misrepresentation and made an effort to provide against it. He only says the exilir was apparently beneficial in its action, and that there was a prospect of its becoming more so. Dr. Loomis describes how he prepared the fluid, which he carefully examined under the microscope after filtration. Not more than an hour was allowed to elapse between the death of the animal from which the fluid was obtained and the operation upon the human patient. Dr. Loomis then gives the detailed results of injecting the fluid into a number of men. He says that some of the reports which he has received from physicians show a wonderful improvement in their subjects. As the cases have not fallen under the supervision of Dr. Loomis he refrains from mentioning them. His observations are summed up as follows:

OBSERVATIONS.

"A. I can see no reason to anticipato danger from the fluid prepared under proper antiseptic precautions, provided the material used be absolutely fresh and free from all traces of disease. My attention was called to the necessity for the closer scrutiny in this last particular by having discovered in specimens taken from an apparently healthy animal, a solitary tubercle in which were demonstrated tubercle bacilli. In none of the cases have I seen any bad results, and only in a few has there been a moderate amount of pain at the point of injection lasting from six to eight hours.

"B. I can explain the singular nervous affection apparent in certain of the cases only on the theory that upon the nerve centres the mixture exerts some power-

ful, but as yet unexplained influence, which, even if its use be eventually proved beneficial in some cases, must render its employment to others a matter of caution. It is far from safe to say and proceed upon the belief that 'if it does no good it can do no harm.'

"2A. I seem to see in almost all the cases of old men subjected to the experiment an increase in strength and vitality which certainly persists for several days. I have noticed nothing in the least resembling the secondary depression which so commonly follows the use of ordinary stimulants.

"B. When used in cases of actual disease no modification of pathological conditions or processes has been recognizable.

"I therefore conclude:

"1. That the injection of this mixture does, as claimed, produce "nutritive modification" in the tissues of elderly men, due probably to the stimulation of the nerve centres.

"2. As far as my own experiments are concerned, sufficient time has not yet elapsed to justify an affirmation or denial of the correctness of Dr. Brown-Sequard's second conclusion.

"3. There is in the theory sufficient ground for further experimentation.—Special dispatch to the St. Louis *Republic.*

PREVENTION OF TYPHOID FEVER.

The State board of health of Kentucky has issued the following circular:

This board desires to call the attention of our health authorities and people to the gradually increasing prevalence of, and mortality from typhoid fever, and to the growing importance of a constant resort to the methods which modern scientific researches have suggested for the prevention of this disease.

These preventive measures are of the more importance to the State because directed against a disease especially prevalent and fatal amongst persons in the prime of life, who contribute most to the public wealth and prosperity. Considered purely as an economic problem, the feature of it probably least thought of by most people, the importance of this disease can scarcely be over estimated. Statistics show that ten persons are sick for every one that dies of this disease, and to say nothing of the cash value to the State of those who die every year, and it is conceded that the State has no more valuable property than that represented in its vigorous population, the loss of time and labor, and the necessary cost incurred in attention to those who finally recover, makes an annual tax upon our people of startling proportions.

Typhoid fever is probably the most preventable of all diseases, not even excepting small-pox. It is now known that, like cholera and dysentary, the germ or specific cause of this disease is contained in the discharge from those sick of it, and that while other methods of introducing the poison into the system are possible, it most gennerally gains entrance through the medium of an infected water supply—usually the use of well water polluted by fecal matter. This may be direct from such water, or indirect, by using milk or other articles of food or drink from cans or vessels washed in it. Ice, from an infected source, is also dangerous, since it has been proven that freezing does not destroy the infective principle.

While water from all sources of supply is liable to contamination, well water is especially so, whether located in city, town, or summer watering place, or country. Thus out of 314 cases occurring in Louisville in 1884, 298 of the persons used well water habitually, and some of the other 16 did so occasionally. In the now famous epidemic at Plymouth, Pa., involving the sickness of 1,104 persons, the death of 114, and an actual outlay in money of $67,100.17, the outbreak was traced to the use of water polluted by the fecal discharge of one imported case of the disease. Facts no less convincing might be multiplied indefinitely if space permitted. In a smaller way they are common in the experience of physicians in active practice,

Usually the wells are sunk near the kitchen, and in dangerous proximity to the privy and other sources of contamination. The well draws its supply from an inverted cone, having its apex at the bottom of the well and its base at the surface of the ground. In dry seasons this base is often extended until the well becomes a receptacle for the more or less perfectly filtered filth from all the sources found in the average back yard, and the water, often sparkling in its apparent purity, becomes a culture fluid for any disease germs finding their way into it.

Two methods of prevention, having the same general object in view, are to be recommended. The first involves the thorough disinfection of all discharges from the bowels of typhoid-fever patients. This is best done by the use of a solution of chloride of lime, 8 ounces to to the gallon of water, using a quart of this solution for each discharge, and allowing it to stand in the vessel at least an hour before emptying. A solution of corrosive sublimate, 2 drachms to the gallon of water, will answer the same purpose, but requires to remain longer in contact with the material to be disinfected. Bed and body linen soiled by such patients should be disinfected by by the use of the same solution or by boiling.

The second method relates to avoiding the use of suspicious water, and especially well water, and where this cannot be done, to boil such water before it is used for drinking purposes. In the absence of a pure and well guarded public water supply, properly stored cistern water is probably open to least objection.

The effectual practice of these methods will require intelligent care and some expense, but it is confidently believed that their general adoption would result in the practical disappearance of a disease which is not only a disgrace to our civilization, but an annual scourge and tax upon the people of Kentucky, in comparison with which yellow fever and cholera sink into insignificence.

BEEF.

The prominence given to the preparations of food from kine may be briefly explained as follows:

Beef is the only article of solid animal food on which man can live and thrive for any length of time indefinitely. This was proved by Dr. Salisbury in his experiments on feeding men with only one solid food at a time; to see how long they could live on it, and how the functions of digestion, assimilation, nutrition, excretion, etc., were performed. He found that beef was the only food which would support life right along. Whence it is apparent that on this dictum has been laid the foundation for the treatment of consumption, Bright's disease of the kidneys, dyspepsia, rheumatism, asthma, hay fever, chronic diarrhea, consumption of the bowels and other diseases which have been classed as incurable, hitherto.

Other details of the advantages of beef as a diet are, —easy digestion and assimilation in the stomach, that is, getting into the system with a minimum of force of digestion, and when there giving a maximum of nutritive value to healthily build up all the normal tissues of the body as the blood—the nerves—the bones—the muscles—organs, as the eyes—teeth—nails—hair—liver —heart—kidneys— spleen— pancreas—intestines—digestive glands—skin, etc.

Beef is generally palatable to all, but there are some strong exceptions, owing to individual tastes, prejudices, feelings and appetite. But even some of these cases have been cured by living on beef alone.

Take a typical case of consumption of the lungs. The morphology of the blood in consumption is characterized by,

1. A ropiness, adhesiveness, blanched color, unrigid outlines, ridgy rows, etc., of the red corpuscles.

2. White corpuscles enlarged by the ingathering of vinegar yeast.

3. Fibrin filaments, massive and marked, which hold the red blood corpuscles in the peculiar aggregations named.

5. Collections of vinegar yeast which take peculiar and varying shapes larger and ameba-like, quite filling the field when the case is very bad. Smaller and more rare as the disease is inactive and not so pronounced.

Now a diet of chopped beef will remove all these abnormal phases and restore the morphology of healthy blood. I speak advisedly. There is no other food liquid or solid, that will do this. It seems as if nothing more were needed to establish the precedence of beef as the best food of motherhood. To adopt which seeks the physical, intellectual and moral culture and welfare of the family in charge. Still it may be well to add that many people have found this out years ago independent of the authority here named. The following is a practical illustration. See "Beef Makes Muscles." Pugilists know it. The world knows it when the daily press teems with every particular about the "Champion Slugger of the World." So of champion oarsmen, walkers, swimmers, divers, cow-boys and all prominent instances of human physical culture. All put beef at the head but none have put it as high as it is here. The products for food may be placed in the order of excellence for people in health as follows:—premising that broiling is the preferable mode of cooking:

The following are from beef;
Round steak, if tender.
Porterhouse steak.
Sirloin steak.
Tenderloin steak
Hamburg steak.
Roast beef.
Corned beef (if not too much corned).
Salt beef.
Dried beef.
Smoked beef.
Tongue.
Ox tail.
Calves feet and heads—veal—tripe.
Milk.
Cream.
Butter—cheese.

The preparations made from the above are not so desirable as the admixtures must be of less food value. There is nothing like the fresh healthy beef for nourishment.

Cooking is needed to destroy parasites in the beef, as tenia, for example, and to make it more digestible.

Raw meat may answer when necesity calls for it, but raw beef does now digest well in man however well it does in lower animals. Beef should not be cooked so as to be hard and dry for it will dissolve in the gastric juices. The best fire to cook beef steak is made of charcoal. Broiling is better than frying as it has a ventilation which allows the products of the high heat to escape, which some consider unhealthy.

In frying the temperature is raised to that of boiling fat, which is about twice as high as that of broiling. This high heat takes out the water of the tissues making the muscle fiber dense, hard and amber like, renders it unfit for digestion, besides keeping in the empyreumatic products of the cooking of the tissues, (the reverse of broiling). Steaks can be nicely broiled over or under a gas stove without burning or spoiling, and this mode of cooking is probably the most uniform, quickest and most preferable common way of cooking steaks.

Oil stoves also offer a good mode of broiling steaks. With the ordinary range or stove there is some tact needed to get the exact temperature for broiling a steak. It is a curious thing that one-tenth of the families in this land leave that nice, important and indispensable work to the lowest order of intellect in the house! Motherhood should see to this department closely and teach its daughters that it is a fine accomplishment to cook a steak properly.

There is another way of cooking a steak, which my son, Dr. J. A. Cutter, approves, which college boys

practice, and which is worth knowing: *i. e.*, putting the steak on to a bed of live coals, glowing but not flaming; the outside may char somewhat, but the steak is always rightly cooked.

Steaming is an excellent way of cooking. No family should be without a steam cooker. The Chamberlain steamer made in Boston, 25 Union Street, is one to be recommended.

Salt meats should not be preferred to fresh, but when selected should be carefully cooked. They are not so nutritious, as according to Leibig, 8% of the nutritious salts are lost in the brine!—Ephraim Cutter, M. D., LL. D., in *Annals of Hygiene.*

THE TREATMENT OF GASTRIC INDIGESTION.

H. A. Hare, M. D., in *Univ. Mag.*—It would be difficult to find any subject in medicine which is more hackneyed than the one on which I now write, but it has seemed to me that some comparatively recent investigations into the physiology of digestion bear so closely upon this important subject, and are so generally ignored by the practitioner, that what I have to say may not seem trite.

Very commonly in the treatment of gastric despepsia proper, pepsin is given in such absurdly small doses as to be almost useless, and yet the prescription as it is taken is intended to aid the true gastric juice which is not thought strong enough to be capable of performing its functions aright. This is not by any means the result attained in the majority of cases for the following reasons—indeed, the direct digestive action of the dose administered probably brings about the smallest part of the good achieved.

It is a mistaken idea to believe that pepsin and hydrochloric acid are simultaneously secreted and utterly independent bodies, or, in other words, that the pepsin may be formed even if the glands fail to form the acid. We know from the experiments of Heidenhain, and of Langley, as well as many others, that pepsin, as such, is not secreted by the glands ready formed, but that these tubules secrete a so-called "mother substance" called pepsinogen, which is absolutely impotent until it is changed into pepsin by the presence of hydrochloric acid or sodium chloride. Consequently we learn that the two digestive elements are very closely associated, and that no acid means no pepsin. In normal life this acid is derived by the splitting up of the chlorides in the blood supplying the glands by the lactic acid which is present almost constantly in the stomach, owing to decomposition of carbo-hydrates. This assertion made by Maly is also confirmed to some extent by Jul. Thomsen, who has shown that very weak acids may displace stronger ones from their bases, and even appropriate the greater part of the base. This is doubtless the reason why common salt is so useful a condiment, since it is broken up in the stomach, thus setting free hpdrochloric acid, besides keeping up the alkalinity of the juices of the body which is so necessary to health and the future secretion of gastric juice. It also explains, in a very ingenious manner, the well-known fact that salt added to a glass of milk increases its digestibility to a great degree. Further than this the usefulness of salt in small amounts taken before meals does not depend, as has been thought, upon an endeavor on the part of the stomach to neutralize the alkali present in a normally acid medium, whereby an excess of gastric juice is secreted, but upon the reasons given above. We find, therefore, that in cases where there is reason to believe that gastric digestion is imperfect, common salt should be used in increasing the amount in the food so that the quantity of hydrochloric acid may be increased. If, however, there is reason to believe that lactic acid is present in too small a quantity to split up this salt, then hydrochloric acid must itself be used, and where it is employed given freely in order not only to act thoroughly itself, but also to perform an equally important function, namely, the conversion of pepsinogen into the active body-pepsin. In other words, deficiency of pepsin in the juice is to be corrected not by a prescription containing much pepsin and little acid, but rather the reverse, for the pepsin in the prescription is after all an extraneous product, while the pepsin brought into being by the acid is a normal secretion. Of course the quantity of pepsin must depend on a normal formation of pepsinogen, but it should not be forgotten on the other hand that as pepsin acts by catalysis, and is a most powerful ferment, only very small quantities of it are absolutely necessary, while large amounts of hydrochloric acid, comparatively speaking, are essential.

In an article recently published in the *Revue Medicale de la Suisse Romande*, Bourget has enunciated some thoughts which are completely in accord with the views here expressed as to be worthy of quotation. He believes, as does the writer, that the hydrochloric acid is generally the secretion which is lacking in amount, and recommends its free employment at the most important part of the treatment of gastric indigestion. He does not seem to do this because he believes it to increase the pepsin, but only because he thinks the acid secretion is more apt to be deranged than is that of the ferment. According to my own practical experience and the much more reliable information gained by experimental research, it is to be concluded, therefore, that pepsin is to occupy the least prominent position for gastric disturbance, and that the acid is to be freely used. Indeed, I am so surely convinced of the importance of the acid in its double sphere that I fear I am sometimes inclined to give almost no pepsin at all.

A Bad Beginning.—Young physician (diagnosing a case): "In the first place, sir, you must drink less coffee."

Patient: "I never drink any coffee at all, sir."

Young physician (considerably annoyed): "Well you ought to."

ORIGINAL ARTICLES.

ATYPICAL URTICARIA.

BY JOSEPH GRINDON, M.D.

Read before the St. Louis Medico-Chirurgical Society.

My object in writing a paper on so trite a subject as urticaria is to call attention to some forms of the disease which, though by no means rare are usually slurred over or altogether left out of the descriptions in the text books. I will not mention the rarer affections such as urticaria pigmentosa, which would seem to constitute a separate pathological entity, nor urticaria bullosa, nor tuberosa, of which I have never witnessed cases. Indeed it shall be my effort to deal as little as possible in the discomposing multitude of sonorous names which designate differences in the causation, duration or severity of the cutaneous accident, or in the shape or color or distribution of the lesions.

From the leading American text-books on diseases of the skin, I take the following definition, the fitness of which characterizes its author. "Urticaria is an inflammatory affection, characterized by the development of wheals of a withish, pinkish or reddish color, accompanied by stinging pricking, tingling sensations."

This definition accomplishes admirably well the purpose for which it evidently was intended, that of conveying to the reader a clear conception of the disease as it usually presents itself, but he who should rigidly limit the extension of the term within that conception, would leave many a case without the local habitation ensured by a name.

And first I would call attention to a class of cases of which the following may serve as a type. The subject of the sketch has retired later than usual after an evening spent with some pleasant companions during which he has consumed some paleozoic cheese or loud tasting caviar with stale rye-bread which mine host has generally set before him, well knowing that while such an array would arouse an insurrection if served at his guests' house, yet when furnished by him it will be greedily and thankfully devoured. A glass or two of beer had contributed to the comfort of our hero's stomach. He has not been long in bed when he becomes conscious of the existence of his stomach and that his mouth and tongue are uncomfortably dry and parched. His eyelids will not remain closed and every possible position in bed is assumed and almost as soon relinguished as a failure. These manœuvers result in the bed clothes becoming tied about the body in a hard knot. Several waves of intense heat sweep over the body, and in a second localize themselves at one or, two,burning stinging points. The unfortunate extricates himself from his unquiet couch, strikes a match and lights the gas with one hand while he scratches with the other.

What does he find, one or more wheals? Perhaps so, and perhaps not. There may be only some parallel red streaks where the nails have been drawn over the skin, which fade in a few minutes under the action of the cold air.

Other causes may give rise to an over-excitability of the skin, expressing itself in this manner. The presence of scabies or pidiculi or any constant irritant, uterine troubles or indeed anything which may at other times cause the fully developed characteristic wheal. The diagnosis of such a case may be difficult if the patient merely presents himself with the statement that he suffers from time to time with more or less generalized itching, burning or stinging. Inspection reveals nothing worthy of notice, with the possible exception of a few nail lesions. The patient has seen nothing like hives, but if you draw your nail or pencil along the bared skin you may notice within a few seconds the appearance of a pink or red streak. This may never become elevated over the general level nor show a pale center, in fact, may show no objective character in common with the wheal but that of evanescence. The subjective phenomena accompanying it may be very similar to those of typical urticaria and again may be more purely pruritic.

Perhaps Cazenave meant to include such cases under the name of urticaria subcutanea. He says that this "is a very rare variety and is characterized by violent acute pricking pain, as if a needle were thrust into the skin. Slight red spots, scarcely elevated, are scattered here and there, but there is no regular eruption. Deep mental emotion and sudden changes of temperature seem to be its chief exciting causes." A partial explanation of these phenomena is afforded by physiology. We are well acquainted with the existence of a vaso-motor center or rather group of centers in the medulla, the action of which,by being stimulated or depressed, is capable of increasing or diminishing vascular tone. In addition to this, however, there would seem to be local vaso-motor mechanisms presiding over limited areas, the proof of which as given in Foster's physiology is in substance of follows:

When the sciatic nerve in a dog is cut, there is a lowering of blood pressure and vascular dilatation in the foot; this is due to the fact that the fibers from the medullary center travel along the sciatic. In a day or two, however, the vessels begin to resume their tone as though there were some mechanism at the distal end which could, if need be, maintain constriction, although temporarily nonplussed by the sudden withdrawal of an influence on which it had long been accustomed to rely.

May we not suppose that in these cases the central tonic action is depressed either by the presence in the blood of some substance brought thus directly in contact with the medullary center, or reflexly by the same irritation of the mucous membrane of the alimentary tract or even of the nerves of taste in the mouth, and

that the local mechanism, thus deserted by a portion of its accustomed support, easily responds to any local stimulus, as for instance, scratching or the friction of clothes? This response would be at first a constriction which would almost immediately give way to a dilatation of longer duration.

The walls of the smaller arteries being dilated, resistance would be lessened, the blood pressure lowered, more blood would be allowed to pass; the capillaries of the skin would dilate and thus produce the erythematous patches of which I have spoken above. If there be the formation of a wheal, the state of things would be somewhat different, constriction and dilation going on side by side in adjoining areas, the lowered blood pressure and accelerated current, in the dilated area soon giving way to a slackening due to a new resistance being introduced by the altered relations between the ca pillary walls and the blood which these contain. There now occurs the phenomenon known as stasis, which is in turn followed by exudation, in this case chiefly se rous.

I am reminded that some recent writers on asthma have advocated for that disease a very similar pathology; this event, was foreshadowed by the observation by Erasmus Wilson of the "occasional concurrence of spasmodic cough and asthma with the development of the rash (of urticaria) at the base of the neck."

The two diseases certainly offer many points of resemblance, 1, their markably neurotic charcter; 2, their suddenness of onset; 3, the apparently trifling and even sometimes ridiculous nature of the exciting cause; 4, the rapidity with which withdrawal of the stimulus will often be followed by cessation of the symptoms. G. H. Fox mentions the co existence or alternation of the two diseases.

The co-existence of localized vaso-motor disturbances of evanescent character on the skin with the same on the mucous membranes, is well exemplified in a case given by McCall Anderson which I will here quote in part: "The case is detailed in the patient's own words. The symptoms did not begin for an hour or two (after eating meat). The first was the feeling of a lump over my stomach, perceptible even to the touch; then appeared nettle rash on my wrists, my arms, my groins and other tender parts of the skin. Along with this the inside of my throat and nose became swelled and my voice hoarse, and a feeling as though I had a violent stuffy cold in the head ensued. If the attack was less severe, I used to go to bed and was well by morning. If more violent, I used to take magnesia, which acted strongly on my bowels, causing first faintishness and then severe purging after which I became well."

I wish next to speak of a condition of things which I have only recently come to regard as a form of nettle rash. The patient who may or may not be otherwise in the possession of good health is almost suddenly taken, perhaps on rising, with a pinkish œdematous swelling of, say one side of the face, the cheek may be made distended, the epidermis glazed and the lids puffed out so as to wholly, or in part, close the eye.

The appearance is highly suggestive of facial erysipelas, but there is no fever, the patient complains of no discomfort unless it be a little itching or tingling, and there are no chills or adenopathy. The swelling remains for one or two days and disappears without leaving any trace or sequel.

G. H. Fox speaks of urticarial lesions producing redness and swelling of the lips and thus simulating erysipelas, and other writers call attention to the great disfigurement which may thus result, but as far as I understand them they seem to refer to the puffing caused, whereas, in the cases to which I refer, no wheals can be made out on the face or elsewhere. I include these cases under the head of urticaria because I do not know where else to class them and their evanescent character seems to give them a right to the place.

Since writing the above, I have come across a very instructive report of a case of "Chronic Recurrent Urticaria," by Elbert Wing, in the *Chicago Med. Jour. and Exam.*, for July, 1888, from which I quote the following: "The first symptoms of one of these attacks, is a sense of numbness and tingling in the part of the surface involved. The skin in this area begins to feel thick and hard and it is swollen and moderately and uniformly red and hot. It becomes moderately œdematous, the itching and pain on pressure are very slight, and there are no white or yellowish white areas over these tumor-like swellings at any time.

The tumefaction proceeds steadily to the maximum, which is usually reached in twenty-four hours, and it is rather longer in disappearing than in developing. The hands become so swollen that the fingers are extended and widely separated, and the tips of the thumb and little finger cannot be brought into apposition. The face swells until the eyes are completely closed."

One feature of this case introduces another class of cases in which the familiar face of the lesion is obscured by the anatomical peculiarities of its seat. I refer to urticaria of the palms and soles.

Here the disease may appear simply as a thickening, swelling and hardening of the volar or palmar structures, fingers or toes. The palms may present a peculiar red and white mottled appearance attended with intense burning and itching so that the patient draws his nails violently over the part. Sometimes a resemblance to the wheal is presented by a red raised ring which follows the circumference of the palm, the included surface being paler in color.

The limits of this paper might be still further extended as there exist still other phases of the diseases which depart from the normal type; but enough has been said to satisfy the purpose of the writer which was merely to afford an aid in certain difficulties of diagnosis.

A Native of India, while fishing, caught a fish resembling an eel. While trying to bite its head off, the fish slipped into the man's throat, and stuck fast, the fins preventing removal. The man died.

NOTES ON FIFTY-FIVE CONSECUTIVE CASES OF LABOR.

BY H. G. HARVEY, M. D., ST. LOUIS.

By the kind permission of Dr. Dorsett, Supt. of the Female Hospital, where these cases occurred, these notes are published. Nothing very abnomal is presented. Although there were surgical cases below, and cases of various contagious and infectious diseases above, the lying-in wards, none of the puerperæ had septicaemia and it was rare for the temperature to reach 100° F. This was doubtless due to the system of antiseptic midwifery in use.

With the exception of one brow, the presentations were all vertex. Positions: O. L. A. 31, O. R. A. 4, O. R. P. 13, O. L. P. 6.

Three miscarriages; 2 due to syphilis, 1 to threatened eclampsia.

Three still-births; 2 due to syphilis, 1 to traumatism.

Three cases of hydramnion, each due to syphilis.

Looping of umbilical cord about the neck, 5 cases.

Adherent placenta and adherent membranes, requiring insertion of hand into the uterus, 1 each.

Application of the forceps, 6 cases; 2 on account of prolapse of cord, 4 on account of uterine inertia.

Prolapse of cord, 2; living child delivered with forceps in each case. In one case, a period of at least 12 minutes elapsed, during which pulsation of the cord was imperceptible before the application of forceps. The child was apparently dead, but by prolonged efforts was revived.

The shortest unbilical cord was 12½ in. long. The expulsion of the child seemed to be retarded by the traction of the cord.

Rupture of perineum, 5 cases, all of which were in primiparæ. Besides supporting the perineum with the hand, chloroform was used during the close of the 2d stage of labor to prevent tearing. One of the five tore before chloroform could be given.

There were 30 primiparæ in all, omiting the case last mentioned, we have 29 primiparæ and 4 lacerated perinea, or less than 13.8%. About the same results were obtained by the two other assistants in like numbers of cases. Charpentier in the Cyclopedia of Obst. and Gynæcology presents a table in which the per cent. of laceration of the perineum in primiparæ, as given by eight writers, varies between 18.7% and 37.6%, the average of the eight being 28.6%. One of these primaparæ in the cases here reported was delivered at the end of the eighth month of gestation of a child weighing 6¼ lbs., the position being O. L. P. and forward rotation not occurring. Chloroform was used and the perineum saved. The use of chloroform during the close of the second stage of labor seems to be recommended by its freedom from danger, the alleviation of pain and a saving of the perineum.

The ruptured perineum was usually sewed several hours after delivery. About 20 ♏ of 40% solution of cocaine muriate were injected deep into the perineum on each side of the line of rupture and the lacerated surfaces treated with the same solution. This answered the purpose well.

There was one case of ophthalmia neonatorum. The method of prevention used was this: As soon as the head was delivered the eyelids and rest of the face were wiped clean and when the arms were delivered they were bound to the body to keep the child from sticking its dirty hands in the eyes, which is about the first thing it usually does. Considering the class of patients, this method would seem to be very satisfactory.

One patient was salivated by a vaginal douche of bichloride of murcury, 1 7000. Her general health was not good, which may account for the fact.

Case 44. Patient had hydromnion and syphilis; child delivered at eighth month having ascites and peritonitis; it gasped a few times and died. Though clearly alive at birth its abdominal skin was macerated.

Case 34. Eight months of gestation; patient was threatened with eclampsia and aborted. The child became much cyonosed when lying on left side or back; the color was normal while lying on the right side, and after keeping it in this position for several days it could be safely left in the other position.

Case 10. Running transversely across the posterior of the vagina was a septum forming with the posterior vaginal wall a pocket large enough to admit the index finger, opening at the posterior commissure and extended upwards the distance of 2½ in. The lower half of the septum was torn by expulsion of the child.

Case 41. Justo minor pelvis; patient primipara, colored, æt. 15. Conjugate diameter of inlet of pelvis 3 in. Delivered at term of 5½ lb. boy, badly asphyxiatered. The labor was normal; overlapping of cranial bones excessive.

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THIGH PRESSURE TO CORRECT FETAL MALPOSITIONS. —King (*Am. Jour. Obs.*, June, 1889) believes that pressure of the flexed thighs upon the antero-lateral regions of the abdomen produced by postures, especially squatting, is an efficient factor in preventing and rectifying fetal malpositions. His belief is illustrated by photographs of the living subject in these positions, and photographs of statuary; he finds corroborative evidence in the customs of primitive people.

ACUTE PTYALISM; TREATMENT WITH SULPHUR.—Dr. Luton writes as follows to the *Union Med. du Nord Est.*: Sublimed sulphur is a very much more efficacious remedy than chlorate of potassium in mercurial salivation. The best preparation is to make a 5 to 100 electuary with honey. Or, a teaspoonful of sulphur may be taken (fasting) twice daily, with water. Sulphur is a specific for the most intense forms of hydrargyrism. —*L' Union Med.*

REPORT ON PROGRESS.

GENERAL MEDICINE.

BY WILLIAM N. BEGGS, M.D., ST. LOUIS.

I.—Sulfonal for Night-Sweats.
II.—Medico Legal Detection of Human Blood.
III.—Relation of the Ptomaines to Some of the Infectious Fevers.
IV.—Report on an Inquiry into the Etiology of Summer Diarrhœa.
V.—Pneumonic Fever.

Sulfonal for Night-Sweats.

Boethrick recommends sulfonal for night sweats. In the majority of cases the sweating ceases after the administration of half a gramme ($7\frac{1}{2}$ grains). He is of the opinion that the inhibitory action of sulfonal on the secretions of sweat is not inferior to that of atropine. Its action is so lasting that during the second night (without sulfonal) perspiration was less profuse than before the institution of the treatment.—*Jour. de Med. de Paris.*

Medico-Legal Detection of Human Blood.

S. Monckton Copeman, M.A., M.B. Cantab. (*Brit. Med. Jour.*) announces a new method of positively determining whether or not a given specimen of recent or partially dried blood is human. The only method heretofore in use (measurement of blood corpuscles) is not absolutely reliable, and on account of the importance of the question, should be, if possible, superseded by a more trustworthy method.

The method proposed in this article is based upon the author's observation that crystals of hæmoglobin may readily be obtained from the blood of anæmic persons (unless they have been recently treated with arsenic). Acting upon this supposition that the diminution of density and the lessened consistence of the blood corpuscles in anæmia would account for the formation of the crystals, he based his method upon an artificial reduction of density by diluting the blood with serum, using that from the sheep. At first he had little success; but, having used decomposed serum, he obtained numerous crystals. The method is in short this: A drop of the diluted blood is placed upon a glass slide. When the edge has somewhat dried a coverglass is gently lowered upon it. Without further preparation the crystals are formed in from ten to forty eight hours.

According to this method crystals of hæmoglobin were obtained from the blood of man, monkey, rabbit and squirrel; none from bullock, pig, sheep, dog and cat. Those obtained from man and the monkey are of reduced hæmoglobin, being the only known exception to the rule that the crystals obtained from the blood are invariably of oxyhæmoglobin. The crystals from human blood are usually rectangular plates, of a pink or pale claret color (when formed in a relatively thick layer of blood) or of a greenish tint when formed in a thin layer. Those from the monkey's blood are "diamond-shaped plates, of which two adjoining sides are longer than the other two."

The author made control tests, using Gamgee's ether method. These confirmed the results which he obtained by his own method in the blood of the horse, bullock, sheep, pig, dog, rabbit, squirrel, guinea-pig, rat, mouse, chicken and pigeon.

The methods, which, up to the present time, have been successful in demonstrating hæmoglobin crystals in human blood are as follows:

1. The addition of decomposing serum (or even better, pericardial fluid) to the blood.
2. Treatment with bile.
3. Agitation with ether.
4. Semi-digestion in the stomach of the common leech.

Of these the first is the only one invariably successful.

Report on the Relation of the Ptomaines or Animal Alkaloids to some of the Infectious Fevers.

Arthur P. Luff, M.B., B.Sc., F.L.C., F.C.S., says, (*Brit. Med. Jour.*) the object of the research was to determine whether any ptomaines or animal alkaloids are present in the urine of scarlet fever and typhoid fever patients. Only the urine of scarlet fever and typhoid fever patients has been examined up to the present time.

The method is as follows: A large quantity of urine is rendered alkaline by sodium bicarbonate solution. It is then thoroughly agitated with half its bulk of ether. After standing for some time, the ethereal solution is removed, filtered and agitated with a tartaric acid solution. This settles to the bottom of the vessel carrying in solution any animal alkaloids, in the form of soluble tartrates. The tartaric acid solution is separated from the ether, and again rendered alkaline with sodium bicarbonate solution. It is then again agitated with half its bulk of ether. After standing, the ethereal solution is removed, the ether allowed to evaporate spontaneously and the residue dried over sulphuric acid.

The following results were obtained: From the urine of a typhoid fever patient, a small quantity of a white, crystalline substance was obtained. From the urine of scarlet fever patients a small but very appreciable quantity of a white, semi-crystalline, faintly alkaline alkaloid, soluble in water was obtained. They were converted into hydrochlorates by dissolving in very dilute hydrochloric acid and gave the following series of reactions, which are not given by any previously known alkaloids.

Reagent.	From Typhoid Fever Urine.	From Scarlet Fever Urine.
Phosphomolybdic acid.	White precipitate.	Pale yellowish-white precipitate.
Phophotungstic acid.	Nil.	White precipitate.
Mercuric and potass. iodide.	Dense yellow precipitate.	Pale yellowish-white precipitate.
Iodide solution.	Brown precipitate.	Brown precipitate.
Tannic acid.	Yellowish-brown precipitate.	Nil.
Picric acid.	Dense yellow precipitate.	Yellow precipitate.
Platinnic chloride.	Nil.	Nil.
Gold chloride.	Dense yellow precipitate.	Slight yellow precipitate.

In neither case was enough obtained to allow organic analysis. Researches are to be continued.

Report on an Inquiry into the Etiology of Summer Diarrhœa.

The following are the results of an inquiry of Henry Tompkins, M.D., at Leicester. Diarrhæa prevails in the heated term in the low lying districts, and attacts persons of all ages, stations and occupations. The mortality, however, is chiefly confined to infants and young children. The higher districts are not invaded.

The cause must be common to all the dwellers. It must therefore exist in either the food, the water or the air. The food and water supplies are practically the same through both high and low districts. Hence the author examined the air as probably containing the etiological agent.

The results are as follows:

When the disease is prevalent the air contains double or treble the number of microbes or their spores, as compared with the periods before and afterward. In the diarrhæa area they are fourfold as numerous as in the healthy districts. Thus in the latter it ranged from 600 to 1400 per cubic metre; in the former from 6,000 to 7,000. Cultivations of the bacteria from diarrhœa districts produced more rapid and complete liquefaction of the nutrient gelatine, and a more offensive odor than those from the healthy areas. Puncture cultures of the former grew as follows: On the second day the needle track distinctly visible. On the fourth day a small white patch developed. On the sixth day this had extended, and the gelatine was slightly liquefied in a cup shape. On the twelfth, the whole of the gelatine to the depth of the original insertion was liquefied.

Examination of the earth by means of gelatine plates produced a similar result. In three cases of post-mortem examination, within six hours of death, cultures were obtained from the kidneys, in two cases from the spleen and mesenteric glands.

Liquefaction was more rapid and the odor much stronger in the growths from the kidneys than from the spleen and glands. In both cases numerous micrococci and bacilli were present. Cultivations in sterilized milk solidified with gelatine, and in milk-whey gelatine, were similar to those already described.

A small dose of all cultures in which the gelatine was rapidly liquefied and a disagreeable odor was produced, was sufficient to produce in the adult subject a sharp attack of diarrhœa of several hours duration.

The author concludes thus:

"I have purposely avoided saying anything as to the particular bacteria probably concerned in producing the disease, because at present I have not sufficient evidence to warrant me in making any positive statement thereon In all the growths hitherto obtained, micro-cocci of various sizes, together with a number of small bacilli, have been present.

In those cultivations which most quickly liquefied the nutrient material in their growth, and where the more offensive odor was generated, these latter existed in largest numbers. Secondary and purer cultivations from these induced diarrhœa within six hours after being swallowed."

"Again, a wide field of research opens itself out as to whether this or any other micro-organism, be the direct cause of the disease, or whether, as is most likely the case, it be not due to something in the nature of an alkaloid or ptomaine, produced by the growth and development of the microbe in the material, whereon it may be, which furnishes it with pabulum and nourishment."

[As a bacteriological investigation this is very unsatisfactory. No pure cultures seem to have been made or experimented with. There is nothing characteristic in the growth, morphology, or other relations of the bacteria. We have no means of knowing whether or not any micro-organisms were present, except the ordinary putrifactive bacteria, whose metabolic products can, as is well known, produce diarrhœa.—*Rep.*]

An Introduction to the Study of Pneumonic Fever.

The following is a short resume by Edward F. Wells, M. D.

The predisposing influence of cold has been much exaggerated. It is greatest when the patient has become debilitated.

The exciting cause is acknowledged to be a micro-organism. This is widely distributed and always present. Attacks are successfully withstood, however, unless some vitiated condition of the system is present. With its entrance into the system occurs first a local irritation. This process may advance to a pneumonic fever, or it may not, the irritating cause being cast out.

The micro-organisms found are many and variously interpreted. Most pathologists regard them as the cause of the disease, some as a result, and some as accidental concomitants. The so-called pneumococcus of

Talamon and Friedlender has attracted most attention. It is an oval micrococcus,(bacillus—Rep.) thrice as long as broad, surrounded by a capsule which is not easily stained. The capsule is lost in artificial cultures, but returns again in the tissues after inoculation. It was at first regarded as characteristic but since its discovery other capsule-bearing micro-organisms have been found. The micro-organism is found most abundantly in the alveolar exudate and the bronchial secretion. It grows readily in gelatine, and in puncture growth, a nail-shaped colony is the result. Inoculations of pure cultures in various animals have produced the pneumonic process.

The contagiousness of the disease has long been asserted, although it has never been demonstrated positively. The author mentions a number of cases which tend to confirm the supposition that the disease is contagious.

[Frænkel's lancet-shaped diplococcus, which is barely mentioned by the author, is probably a more frequently acting etiological agent of pneumonic fever than Friedlander's bacillus. Its characteristics ars as follows:

In form it is oval or lancet shaped, and occurs generally as diplococcus. Like Friedlander's bacillus it possesses a capsule which is, however, not so easily stained. It does not grow at all by ordinary room temperature. The nutrient material must be very carefully neutralized. On solid media it forms in 24 hours a thin transparent layer extending over the surface. In bouillon there appears in 24 hours a uniform cloudiness, which finally settles to the bottom as a peculiar granular sand-like deposit. Cultures transferred from fluid to solid media have the power of growing at from 25° to 27° Centigrade. Frænkel asserts that it is the only cause of croupous pneumonia in man.—*Rep.*]

TRANSLATIONS.

HEREDITARY SYPHILIS.

Series of Lectures delivered at l'Hopital Saint Louis by Professor Fournier. Translated by Dr. Benno von Steinmetz.

Lecture IV.

Gentlemen.—In my last lecture I showed you the happy influence which time exerts upon syphilis regarding heredity; to-day I shall speak to you of the treatment of syphilis, the influence of which is at least equal to that of time. It is surprising to see how much rational treatment can correct, modify and suppress the hereditary syphilitic influence; observations based upon this can be collected by the thousand; a syphilitic husband produces a series of pregnancies, which are terminated either by abortions or by the birth of syphilitic children; he is treated, and from this time on, his children are born healthy. Treatment has the same efficacy, whether the hereditary syphilis is transmitted from the father, the mother, or by both parents together.

Of paternal heredity, I have already cited some examples; another is the following:

A healthy woman had a series of five abortions after marriage; she consulted a physician, who could not find any other cause than tertiary symptoms of syphilis by the husband. Following the advice of the physician, the husband was properly treated, and one year later the wife gave birth to a healthy child.

It is the same with maternal heredity. A syphilitic woman married to a healthy man, had two syphilitic children who died soon after birth; she was treated, and two years later gave birth to a healthy child.

The happy influence of treatment is also generally noticed in hereditary syphilis of mixed origin, and we can affirm that, from whatever source hereditary syphilis be derived, the scientific treatment of the parent will prevent its manifestation in the child. I recall to your mind those striking cases already cited, in which hereditary syphilis manifested itself in a series of abortions, and when specific treatment was prescribed, this series was interrupted.

A syphhilitic woman, who had aborted eight times in succession, submitted to treatment by Dr. Notta. The ninth pregnancy was terminated by the birth of a healthy child, which was observed for five years, without showing any signs of the disease. The virtue of the treatment is even better demonstrated by the temporary suspension of the capability to transmit syphilis, which is effected by treatment.

Thurmann has observed the following case: A syphilitic woman had seven pregnancies, all terminating in abortion; during her next two pregnancies, she received treatment and gave birth to healthy children. Believing herself completely cured, she suspended treatment and was impregnated a tenth time; the child was born syphilitic and died soon after birth. She resumed treatment and her next child was born healthy. What better proof than the foregoing can we demand for the influence of treatment?

Statistics will give you another convincing proof. I have extracted from my observations those cases, which give me sufficient details, and classifying them in four groups, I have obtained the following result:

	Mortality Through Paternal Heredity. Per Cent.	Mortality Through Mixed Heredity. Per Cent.
No Treatment	59	86
Short Treatment	36	85
Treatment lasting a year	21	36
Prolonged Treatment	3	36

Let us confine our attention to the extremes. From 59 per cent the mortality can be reduced to 3 per cent by treatment. It is impossible not to be impressed by the difference in the result obtained in men who were thorouguly treated, and those who neglected to treat themselves altogether. Every physician must have observed the same results.

Men who are not treated at all, are rare. In 28 years of practice, I have encountered 14, which together rep-

resented 45 paternities; the mortality of these was 82 per cent. In the last two years we have collected here 13 cases of neglected syphilis; these 13 women had together 59 pregnancies. The result was 49 deaths and 10 living children, which is a mortality of 83 per cent.

It is in those cases where treatment does not intervene to correct the influence of hereditary syphilis, that we see a woman having 10 successive pregnancies, lose 9 children and raise but one, and that one crippled by the disease. Dr. Le Pileur has also observed a series or eleven pregnancies terminating in ten dead children and only one living.

Thus the results are absolutely disastrous and the mortality considerable, if the patient is not treated at all or not enough; on the contrary, the influence of syphilis is decreased by sufficient treatment.

The two factors, time and treatment, then each act separately upon syphilis and militate against its influence; both combined, are the best safeguard against hereditary syphilis. A syphilitic man, who marries long after having contracted the disease, and who, in addition, has been specifically treated for a considerable length of time, is never a dangerous father.

The action of time alone is insufficient, because syphilis can be transmitted after 10, 12, and 18 years, and probably later still; neither is treatment alone certain, and it would be imprudent to marry after six month of even active treatment, because the influence exercised by it cannot be permanent in such a short time. It is necessary to have recourse to treatment lasting several years.

For a long time I have studied the subject of the admission of syphilitics to marriage, and those, who have married with my consent, have never had cause to regret it. I exact two conditions. (1) Purification by time. (2) Purification by three to four years of specific treatment. I am convinced that under these conditions a syphilitic man will be an inoffensive husband and father.

This certainly is of the greatest importance, not only from a medical, but also from a moral stand-point. It sustains and comforts the diseased; there are imprudent and cynical men, who are not held back from marriage ties by their disease, but there are also men (and their number is greater than the former) honest and of upright character, who are depressed and terrified by their disdisease, not for themselves, but because they believe themselves deprived of the power of having a family of their own.

Many syphilitics will ask you, after you have treated them for some time: Can I ever marry without having diseased children? What a service can you render them, in answer to their question, that all is not lost for them; that after being under treatment for a certain time they will make as good husbands and fathers as others not afflicted with the disease. You can and you must affirm this to your patient.

The next question to be answered is the following: Does there exist any relation between the gravity of a syphilis and its hereditary gravity? I answer, that in some cases there is, but generally there is not. There are cases of grave syphilis, where we find the heredity of a grave character also. I have seen a man, the subject of very grave syphilis, with all sorts of manifestations; glossitis, gummata etc., who, marrying eight years after having contracted the disease, had a very rachitic child, and ten years later had another, which died of syphilis at the age of 2 years.

But this is not the rule. First, a syphilis manifestly grave, may not be so in its heredity. A patient of Dr. Notta, contracted syphilis in 1856; in the first year he had cerebral manifestations, but he married afterward and had a healthy child. I have seen a young man, who in 1871 had very grave syphilis; in 1872 he had ecthyma, rupia, intense cerebral symptoms etc; in 1873 he yet showed syphilides, and contrary to the advice of Dr. DeLorain and myself, he married and impregnated his wife, who gave birth to a sound child, which had shown no symptoms of heredity up to a year ago, when I lost sight of it. The father still showed signs of the disease two years after the child was born.

On the other hand, the benignity of syphilis is in no instance a guarantee of the benignity of its hereditary consequences. I have extracted ten cases out of my observations, which prove this. The following case I owe to Dr. Robin: A man, having contracted syphilis was treated for three years; he never showed any other symptoms than the original chancre; at the end of the three years he got married, gave syphilis to his wife, and the first child was still-born; although resuming treatment, his second child had very grave hereditary syphilis. I could cite to you many other cases of mild syphilis, which proved very pernicious in heredity; for example, six successive pregnancies, all terminating in still-born children.

Cases of this kind are mostly observed in cities. It is nearly always syphilis, very mild in its manifestations and causing the death of a series of children before, or shortly after birth. To better fix this idea in your mind I will relate to you the following case: I was called in consultation to see a young woman, who presented typical tuberculous syphilis. Her husband, ten years previously had a mild syphilis, which showed itself in the chancre, roseola and a slight thinning of the hair. After being treated for a short time, he married without consultation. The wife being infected, was treated for a short period (because she did not know the disease with which she was affected) and to all appearances cured. Four pregnancies which followed, were terminated, the first two, by abortions, the two last by the birth of two syphilitic children both of which died two days after birth.

Is it necessary for the production of hereditary syphilis, that the disease manifest symptoms, or is it sufficient only that it be active without manifestation in the parent? Experience shows that it suffices if the disease is active, without manifestations. I have already related to you the history of a friend of mine who had syphilis several years before his marriage:

For four years he had noticed no signs or symptoms of any kind, and nevertheless his wife passed through four successive pregnancies, all of which terminated in abortion. Following my advice, he placed himself under treatment and he now has four healthy children living. I also recall to you the case of Dr. Robin, related above.

Is hereditary syphilis more easily transmitted if, at the moment of fecundation, manifest symptoms exist? This is a very difficult question to answer, because it is nearly impossible to know whether at the moment of fecundation the symptoms are exhibited. I am not certain on this point, and I do not think that the presence or absence of a mucous patch can exert much influence upon the intensity of the disease. It is of a greater import to search whether syphilis is more grave from a hereditary point of view, in the great crisis of the secondary period, or in the course of a long absence of signs. Experience tells us, that a child, procreated in the midst of the secondary state, when the nervous troubles are succeeded by syphilitic fever, and when all these symptoms show a sort of fermentation or effervesence of the virulent principle, is condemned. On the contrary, a child procreated at the end of a long absence of symptoms, will usually be born sound. It seems therefore, that the danger of hereditary syphilis is not the same if the child is procreated in the course of the active crisis of the disease, or in the course of a prolonged latent state.

A New Method of Treating Fractured Patella.—At a recent meeting of the Clinical Society of London, Mr. Mayo Robson showed a patient (a young woman) on whom he had operated by a novel method to secure bony union in a case of fracture of the patella. The skin over and around the joint was cleansed and rendered aseptic and the joint then aspirated. Drawing the skin well up over the upper fragment, a long steel pin was passed through the limb from one side to the other, just above the upper border of the patella. The limb being similarly transfixed just below the patella, gentle traction on the pins brought the fragments into apposition. Antiseptic dressing was applied, and left undisturbed for three weeks; when it was removed there was no sign of irritation and the temperature had never been above normal. As the fragments seemed well united the needles were withdrawn, a plaster-of-Paris splint applied, and the patient allowed to go home. Mr. Robson observed that the only precaution necessary was to draw up the skin over the upper fragment in order to avoid undue traction upon it when the fragments were approximated. If there was much effusion in the joint it would be desirable to aspirate.—*Med. Rec.*

To Quell the Smell of Iodoform.—Tar is said to be capable of effectually deodorizing iodoform.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,
Editor.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

Communications relating to subscriptions and advertisements should be addressed to J. H. Chambers, 914 Locust Street, St. Louis.

Original Articles, Reports of Cases, Correspondence, etc., relating to interesting medical topics, are cordially invited.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, SEPTEMBER 7, 1889.

The Irrepressible Mad-Dog.

Almost every paper we pick up contains one or more accounts of some dog going mad, biting children or persons unfortunate enough to be in the vicinity at the time; infecting other animals and thus giving a start for an indefinite spread of this truly horrible affection.

Is there any reason in this? Is there absolutely any cause why we should subject ourselves and our neighbors to the never-ending, always impending danger of being poisoned by some vicious brute who lays across our path, or stalks in our way and resents any trenching on his inviolable right to do so? Have we any more right to imperil other people's lives by keeping a tamed rattlesnake, for instance, whose only danger lies in the fact that at some time he may lose his acquired and habitual good temper and bite anyone within reach? This is not vastly different from the case of the dog; it is only a difference of degree of liability to the two dangers, less risk being run by associating with the dog, perhaps, but the greater horror attached to, and certainty of death, from the disease which he is capable of transmitting, outweighs this many times.

The step now being entertained in England of issuing a general order for the muzzling of all dogs in the Kingdom, is a wise one and the example should be emulated by all nations who are subjected to such general risks.

Of what value is the existance of a whole city full of dogs, as compared with one cherished human life—not to speak of the families ruined by such execrable means!

Allowing worthless dogs to run loose in all their dangerous freedom, is only a habit, which like other usages and customs that have given way before the march of progress and the needs of civilization, should be relegated to the unenlightened past or confined to the home

of the barbarian. The dog must go! And the sooner the better.

Sterilization of Milk for Infants.

Cow's milk contains three times as much cascene, and a half as much sugar as mother's milk. This difference of composition is easily corrected by mixing the cow's milk with saccharine water.

But what constitutes the greater inconvenience to the little suckler, is that under these circumstances, the milk is always infected by lactic ferment and diverse other microbes, whereas the infant nourished from the breast receives perfectly aseptic milk. Soxhlet was the first to show the advantage to be derived from previously sterilizing the milk in quantities sufficient for each meal; but his apparatus is very expensive.

Eisenberg (*Paris Medical*) proposes a modification which is practicable for the most economical household. As soon as received, the milk is mixed with the sugared water in the proper portions, then distributed in as many bottles as the infant will have meals, say a dozen. Each bottle is stopped simply with a tampon of cotton. All the bottles are then stood on a griddle-like wire screen, the whole is placed in an iron kettle half full of water. The lid is closed tightly and the water is boiled for thirty or forty minutes, so that the bottles, enveloped in a vapor at 100° C. (212° Fah.), are perfectly sterilized. They may then be taken from the kettle and their con tents may be kept many days without alteration. It is well at the end of this time, in summer, to change to a fresh vessel.

In order to serve the milk, it suffices to replace the tampon of cotton with a stopper-and-tube; but it is essential that the bottle be not opened until the time it is used, and that a fresh bottle be taken at each repast. The empty bottle should be washed with lye-water before being used again.

Regulation of Hypnotism.

The International Congress of Hypnotism, recently in session at Paris, formulated and adopted the folfowing:

Whereas The Congress of Hypnotism perceiving the danger involved by public experiments and seances of magnetism, and

Believing that the employment of hypnotism as a therapentic agent should be restricted to the demands of medical science, and that the official instruction concerning its application should belong to psychiatry, therefore be it

Resolved: That public seances of hypnotism and mag netism should be interdicted by the authorities in the interest of the public hygiene and sanitation;

Resolved: That the practice of hypnotism as a curative means should be subject to the laws and regulations which govern the practice of medicine.

Resolved: That it is desirable that the study of hypnotism and its application be introduced and adopted in medical schools, as a part of the medical instruction afforded by these schools.

Hypnotism as a Moral Educator.

At the same congress, M. Berillon read a paper on the "Application of Suggestion to Pediatry and to the Mental Education of Vicious or Degenerated Infants." He concluded:

1. That hypnotic suggestion employed rationally and by competent physicians, frequently constitutes a therapeutical agent capable of being applied with advantage in pediatric science.

2. The affections in which the indications for suggestion have been established in infants by observations carefully made and noted are: Nocturnal incontinence of urine; want of control, either nocturnal or diurnal, over the bowel; nervous pains; nocturnal terrors; chorea; irrestible onanism; blepharospasm; convulsive attacks; purely functional affections of the nervous system.

3. Hypnotism has not, up to the present, given appreciable results in the treatment of idiocy or cretinism.

4. Suggestion, considered from a pedagogical standpoint, constitutes an excellent auxiliary in the education of vicious or spoiled infants.

5. The employment of suggestion should be reserved for the cases in which parents or guardians avow their complete powerlessness. It is especially indicated to counteract vicious tendencies, habits of mendacity, of cruelty, thieving or inveterate slothfulness.

6. The physician should be the sole judge of the advisability of applying suggestion to the treatment of such mental irregularities, which depend on a true pathological state, most generally hereditary. And in any case, it is not well to use suggestion in pedagogy when the child is susceptible of being corrected by the usual methods of education.

Gonorrhœa in the Female.

At the Lyons Med. Soc., Mr. Horand, read a memoir on the subject of gonorrhœa in the female, which was of importance, in that his conclusions, based on observations among 5,090 women, and 764 little girls whom he had attended at l'hospital des Chazreux, were very decidedly opposed in the many respects to the views entertained by some of the leaders in French societies.

It will be remembered that last winter M. Eraud startled the profession by declaring that gonarrhœa did not attack the vagina; that where the discharge appeared to come from this location, it was, in reality the pus and secretion that had flowed down from the uterus, and that, in the great majority of cases, the uterus, was the part affected, and not the vagina. Indeed, that the mu-

cus membrane of the vagina was so constituted that it was not a proper seat for gonorrhœal inflamation. Eraud based these assertions on the results of over a thousand examinations with the microscope.

Now, M. Horand summarizes the relative frequency of the different parts of the female genitalia attacked, as follows:

Vulvitis is rare in the woman, more frequent in the girl. It exists either alone or associated with vaginitis or urethritis. Vaginitis is more frequent than vulvitis. It may constitute the sole gonorrhœal poison; it is less frequent with the woman than the girl, where it is much more tenacious. The gonococcus can probably exist in a latent state in the vagina. When women are not affected with gonorrhœa, the menstrual blood, the 'whites' and lochia are not contagious.

Uterine gonorrhœa is very rare; it may be complicated with pelvia peritonitis. Vaginitis probably always coexists with it. Gonorrhœal Bartholinitis is a secondary accident, from propagation of the affection. Rectal gonorrhoea is relatively frequent in women. It does not exist alone.

From an examination of 483 women, it was shown that the urethra is most frequently attacked (140 times) in girls, the vagina is the seat of predilection.

For the treatment of gonorrhœal urethritis, injections of nitrate of silver solution were found to be most affective; for vaginitis of girls, hot irrigations with boric solution, 1–1,000, and the insufflation of powdered iodoform were used. With the adult, the author was in the habit of painting the walls of the vigina every four or five days with a stick of silver nitrate; the same treatment served to cure gonorrhœa of the cervix and the anus.

Urethral discharges of women, says the author, are not always gonorrhœal. Non-contagious discharges may follow as a result of excesses in venery, in drinking, from irritation of the urethal mucous membrane and from the influence of constitutional affections.

American Pediatric Society.

The Society was organized at Washington in September 1888, and was the result of a preliminary effort made in the Pediatric Section of the Ninth International Congress. While this is one of the youngest Special Societies in the United States it is not the least lusty as will appear from the programme which we present on another page of the Review.

Dr. Jacobi is President of the Association and is down for a paper upon "Americanism in Early Life."

A number of names appear upon the roll of members who are prominently identified with the "Section on Diseases of children," of the American Medical Association, and it is to be hoped that their influence in the Special Society will be sufficiently strong to arouse a unanimous spirit of co operation upon the part of the latter, for the Section of the A. M. A., which is engaged in the same work.

The criticism has been passed upon the various sections of the A. M. A. that they are crude in their work and more to the taste of general practitioners, but let us suggest gently to the gentlemen members of the special societies that it is a duty they owe to the profession which has permitted and fostered their growth, that they give it the benefit ot their technical knowledge and laboratorical accumulations. The medical profession—the great body of general practitioners which is the author of the Specialists being—will be the gainer by this co-operative work as it deserves to be, and the select few, members of special societies, who move in narrow grooves will have their views broadened, their opportunites for good, enlarged, and in no way will they be the losers.

We urge upon Drs. Jacobi, Osler, Meigs, O'Dwyer, Latimer, Booker and other earnest workers in the Pediatric field to encourage the spirit of sympathy between the American Pediatric Society and the American Medcal Association.

The Danger of Intra-Uterine Sublimate Injections.

Dr. Legrand published in the *Annals of Gynecology* the account of a case of acute hydrargyrism, resulting in death, following two intra-uterine injections of sublimate solution, 1 2000. This observation adds another to the list of such cases, already assuming startling proportions, and shows that the use of such injections or irrigations after labor is not as free from risk as has been thought.

In the case mentioned, only two injections were made with two hours interval; about ten litres (ten quarts) of the solution were used, the patient being about three feet below the fountain. This injection was followed by another of boric solution. On the next day the first phenomena of intoxication manifested themselves, and death occurred three hours later. The autopsy showed the characteristic lesions of mercury poisoning in the intestine.

Dr. Legrand believes that in this case, the intoxication was produced by the direct entrance of the sublimate into the circulation. The retention of the placenta in a lax uterus favored, to an unfortunate degree, the patency of the uterine sinuses. A slight excess of water-pressure was sufficient in a very short time to send into them a mortal dose of the poison.

The practical lesson is that sublimate, even in very dilute solution should be used in such cases only with the most vigorous circumspection. Its use is dangerous especially when there is retention of aborted placenta, in a uterus incompletely developed.

Dr. Emory Lanphear, the genial editor of the *Kansas Med. Index* made a short visit to the city on the 31st ult.

MEDICAL ITEMS.

Contagiousness of Typhoid Fever. — Berthet has reported a small epidemic of typhoid fever occurring in a number of restaurant waiters who slept successively in the same bed without having the room and furniture disinfected.

Remarkable.—A 14-year old girl, a passenger on a Vandalia train, walked off the platform of the car while the train was dashing along at 40 miles an hour, near Effingham, Ill., recently, and escaped without a bruise. She was a sleep walker.

Beaumont Medical College.—Dr. D. V. Dean, has been elected Professor of Physiology, Pathology and Bacteriology, Beaumont Medical College.

An emergancy hospital with forty beds, has lately been established in the college building.

Death, Notwithstanding the Pasteur Treatment.—On June 12th, last, L. Trottet, a boy, æt. 13 years, was bitten at Paris, by a mad dog. Two hours later he was placed under Pasteur's care and treatment, and received inoculations for fifteen days, but succumbed on the 13th of July, following.

A New Operation for the Cure of Prolapse of the Uterus.—This is a method suggested by Terrier, and practiced so far, by himself, Pozzi, Verchere and Baudouin. It is designated laparo-hysteropexy, and consists in sewing the uterus to the anterior abdominal wall, through a supra-pubic incision.

Traumatic Phthisis.—Prof. Jaccoud showed a patient at his clinic recently, who had acquired phthisis from a severe crushing injury of the thorax. He had been caught between two wagons and lost consciousness. There was no fracture, but a pneumonia, which supervened, ran into phthisis, which the patient then had to a marked degree.

Operation with Hypnotsim as an Anæsthetic.—M. Mesnet recently operated on a vaginal cystocele by anterior colpoperineorrhaphy, with the patient simply under the influence of hypnotism. During the operation she conversed with those about her and did not even know that the cutting was going on; she was only convinced of it afterward by the evidence of the blood.

Frequency of Diabetes in both Husband and Wife.—M. Debove reported to the Societe Medicale des Hopitaux, what he took to be a singular coincidence, viz., the simultaneous existence in husband and wife of diabetes mellitus. He had hardly finished when one of the members asserted that he had seen an instace of the same thing; then another member said the same, then another and another, until there were reports of eight such pairs of diabetics. The question then arose as to whether the disease were not contagious. This was left to be determined by further investigation.

The Effect of the Projection of Cold Water Against the Neck in Chloroform Syncope.—Michon says that in anæsthetizing animals with chloroform, in case of syncope, when he was unable to revive them by means of artificial respiration and electricity, he would resort to strong jets of cold water projected against the neck. Almost invariably the animal, which might for a time seem to be dead, would begin respiration at the end of a few minutes.

Oxygenated Water in the Treatment of Gonorrhœa:

℞	Aquæ oxygenat., 10% - -	℥j.
	Aquæ dest., - - - - - -	℥j.
	Hydrarg. bichlor., - - -	1/6 gr.

Three injections should be given daily, and care should be taken that the fluid reaches all affected parts of the membrane, by manipulating with the fingers.—*Donald McRae, in Deutch. Med. Zeit.*

Death from the Elixir.—As predicted in the Review sometime since, death has resulted from the careless preparation and administration of the testicular liquid.

In Dayton, Ohio, a man æt. 69 years, voluntarily submitted to the injections three weeks ago, in order to obtain relief from rheumatism. He has obtained it—in the grave. Septic inflammation cellulitis and gangrene followed close on the introduction of the fluid, spread over both lower limbs and body, and finally caused his death.

Andy Garrett, colored, of Louisville, also desired the injections as an anti-rheumatic; abscess, septicæmia and death resulted.

The Antiseptic Properties of Saccharine.—Constantin Paul has been studying the influence of saccharine, the remedy employed in diabetes, when given in various ways. He has established the fact that its antiseptic power diminishes with the addition of alkalies and increases pari passu with a decrease in its alkalinity. This becomes of much import in administering the drug. If it is desired to employ it as a substitute for sugar, and not as an antiseptic, in diabetics, it is necessary to add an equal proportion of bicarbonate of soda. If the saccharine have not been alkalinized, digestive fermantations will result and the patient will experience the colicky pains so common with diabetics.

If, on the contrary, it is desired to obtain an energetic antiseptic action, the saccharine should be given pure in powder. The author has found that whenever there existed microbes of putrefaction, of suppuration, or the other microbic forms which inhabit the mouth, the proportion of two parts of bicarbonate of soda to three parts of saccharine, permitted the arrest of development of such microbes.

This addition of bicarbonate of soda to saccharine renders it soluble and makes it a valuable dentifrice.

A Short Cut to Fame.—The following squib we take from the *Illustrated Med. News*: There is too much tendency in the present day to resort to personal advertisement, and to bring one's name before the public in non-medical newspapers. But, happily, we have never yet in this country reached the standard of perfection which has been arrived at in America. In an American paper we find the following heading: "A Curious Way to Avertise an *Obstetrician.*"

"Flamin.—Saturday, the 9th inst., at 8:15 a. m., to the wife of D. W. Flamin, of College Hill, a ten-pound boy. Thanks to Dr. Wallingford, of Cincinnati.

"Gallion.—June 5th, to Mrs. Nona Gallion, of Liberty street, a nine-pound girl. Thanks to Dr. Wallingford."

When reading such a notice one naturally feels inclined to look at another side of the question, and to ask whether no thanks are due to Messrs. Flamin and Gallion as well as Dr. Wallingford. But we can hardly suppose that Mesdames Flamin and Gallion would have permitted such a notice to be inserted in the paper in question were it not with the consent of Dr. Wallingford.

FROM THE GERMAN.

By Dr. W. C. Mardorf, St. Louis.

Morphinism Treated by Hyprotism.

Dr. Johansen, in *Nord. Med. Archiv.*, relates his own case. He used morphine constantly for nine years, at times in large doses, but during the last few years he reduced the dose considerably twice yearly, until his final dose from 17 grains daily, was lowered to one grain.

By fixation of his gaze upon some object he was enabled to throw himself into a light hypnotic sleep, which substituted the natural sleep that was lacking. According to the author, the relief from insomnia produced a great psychical calming effect, which proved of considerable service in rendering possible the gradual reduction of the dose.—*Centralblatt f. Ther.*

Torsion of the Urethra for Incontinence of Urine.

Dr. Gersuny, in *Centralblatt f. Ther.*, describes the following operation which he performed for the cure of incontinence of urine in a girl aged 14, on whom various other operative measures had failed. A circular incision was made surrounding the meatus urinarius and the uretha, protected by a thick covering of connective tissus, was dissected loose for a distance of 2 cm. ($\frac{3}{4}$in.) as far as under the public arch. The urethra was then twisted upon its long axis until the meatus had described an arch of 180°, and the latter was fixed into its new position by button sutures. Two repetitions of this procedure were necessary, until the meatus had been twisted around 450°, or $1\frac{1}{4}$ circles, as after the first operation there remained incontinence while in the standing posture. Immediately following the last operation the patient could retain urine for 3 hours while sitting or lying down, but only for 5 minutes while walking about. For months after the operation, urine could be retained for 5 hours, but each act of urination required 4 minutes; the condition arrived at resembled the normal one closely, with the exception of the comparatively long time required for emptying the bladder, and this fact is not of much importance when one considers that the intervals or urination are not more frequent than in health. The operation seems to be adapted to those cases in which the sphincter vesicæl is wanting or is incapable of being made to functionate. The difficulty of the operation lies in the fact that there can be no guidance as to the amount of torsion necessary in each case.

Results of Pasteur's Treatment.

During the year ending with April 1889, Pasteur treated 1673 patients bitten by animals supposed to have been affected with rabies; of this number 1487 were French and 186 foreigners; 118 had been bitten about the head or face. The total mortality was 13, 10 dying during treatment, and 3 afterwards, or one fatal case in every 557 who had undergone the treatment. Of the 10 dying during treatment, 6 had been bitten about the head.—(*Deutsch. Med. Zeit.*) We do not know whether it was ascertained that the animals inflicting the injuries were affected with genuine rabies in each case, and it would be of considerable interest if we could obtain the statistics of a similar number of persons who had not received the benefit (?) of Pasteur's treatment, and could contrast them with the above figures.

Pyrodine in Phthisis Pulmonalis.

George Lemoine has found pyrodine to be of good service especially in cases of phthisis in which the fever ranges high. The temperature is reduced 1 to $1\frac{1}{2}$° C. (2 to 3° F.) after a dose of 5 cgms. ($^4/_5$ gr.) this dose is sufficient to hold the daily temperature curve between 37 and 37.8° C. (98.5° and 100° F.) and the effect lasts for several days. It also has a great influence upon the neuralgias, the pains in the shoulder and abdomen; 10 cgrms. is the maximum daily dose. After a dose of 15 cgrms. ($2\frac{1}{3}$ grains) the following toxic symptoms were observed: cyanosis of the face and extremities, coldness of the limbs, a lowering of the temperature to 35° C. (95° F.) profuse perspiration, at first acceleration, but afterwards slowing, and almost complete stoppage of the pulse and respiration, and finally profound collapse. Some patients show a marked idiosyncrasy for pyrodine. —*Paris Gesell f. Biol.*, in *Deutsch. Med. Zeit.*

The Transmission of Gonorrhœa as an Indictable Offense.

The *P. M. Ch. Pr.*, relates the following: A man was charged with rape by a 15 year old girl at Steinamanger, but at the trial he was declared not guilty of the charge, as no force was employed. The testimony showed, however, that at the date of intercourse the man was suffering with gonorrhoœa, and that afterwards the girl also had gonorrhœe, and on this basis the prisoner was charged with inflicting severe bodily injury upon the girl, was found guilty and sentenced to one month imprisonment. The two higher courts approved this, but thought the punishment was too light, one court lengthened the term of imprisonment to six months; the other and highest authority thought it was still not enough, and increased the punishment to one year.—(*Deutsch Med. Zeit.*) While such a proceeding is very unusual, it is not unjustifible, and should the example be followed, the prisons would soon need enlargement. For obvious reasons there is no fear that such will be the case.

Signal Service in Medicine.

A new regulation has recently gone into effect at the university clinic at Paris, according to which every labor is published by means of a flag, supposable for the benefit of students. A blue flag means a normal labor, a yellow flag denotes a bad position, and a green flag indicates an operation.—*Deutsch. Med. Zeit.*

Another Remedy for Ingrowing Toenails.

Dr. Theodor Clemens, in *Allg. Med. Centralz*, states that he employs the ordinary stannial-paper (tin-foil) which is so commonly used as a wrapper for soap, chocolate, etc. The nail having been thoroughly cleansed a pad of the paper is packed tightly underneath the nail where it is imbeded, after which the toe is enveloped in a strip of the same, the whole being covered by a thin layer of wax. The action is not wholly mechanical, as the contact of the tinfoil serves to dry up and harden the diseased tissues, and the structure of the nail itself is improved. It requires some weeks to effect a cure, and the packing must be changed at intervals of from eight to ten days. It is found that the epidermis at the margin of the nail becomes dry, firm and capable of more resistance. At each successive dressing the packing is inserted with greater ease than at the last.—*Central blat. f. d. ges. Ther.*

Antipyrin Subcutaneously in Acute Articular Rheumatism.

Dr. Heinrich Amon (*Int. Klin. Ruhdsch.*) reports the case of a laborer, aged 39, affected with acute articular rheumatism, which he had already had previously. Salicylic acid and antipyrin were given by the mouth separately and in combination for a long time without effect. After the disease had lasted six weeks the author used antipyrin subcutaneousiy in .75 Gr. doses (12 grains) injected twice daily in the vicinity of the right knee and left ankle joints, the quantity injected daily amounting to 3 Grams (48 grains). He even injected small quantities into the joint-cavities once or twice without much increased pain. Benefit was experienced on the first day in the form of a decrease of the stiffness and a moderation of the pain, and these had disappeared entirely in three days.

On the other hand a report comes from another quarter, of a case of acute rheumatism of the left shoulder joint, in which the use of salicylic acid and antipyrin by the mouth had also proved unsuccessful, where antipyrin was injected into the painful places and the deltoid muscle without the slightest effect; the injections caused considerable pain and discomfort.—*Deutsch Med. Zeit.*

BOOK REVIEWS.

Transactions of the Thirty-Ninth Annual Meeting of the Illinois State Medical Society, 1889.

This volume, which is much larger than its predecessor, bears the stamp of the work bestowed on it by its editor, Dr. David W. Graham, of Chicago. The high standard of excellence shown by the previous Transactions af the Illinois State Medical Society is fully maintained in this one. The custom of presenting photogravures of the members who have died during the previous year, is not veered from. In this number the likenesses of Drs. Oliver Everett, Jno. B. Felker, Ellen A. Ingersoll and E. A. Goodwin, give sad token of their decease.

The subjects discussed by the papers are well diversified and interesting, as may be seen by the following partial list:

Tepid Baths in Pneumonia, by G. N. Kreider; Writer's Cramp, by D. R. Brower; Tubercular Joint Disease, by A. E. Hoadley; The Hedge Thorn Poison, by David Prince; Tubal Pregnancy, A. Grim; Reports on Gynecology, H. F. Byford and C. Truesdale; Apostoli's Method in Fibroid Tumors, F. H. Martin; Diphtheria, R. J. Mitchell; Hernia in Infants, Katherine Miller; Syphilitic Cyclitis with Gummata, Lyman Ware; Hygiene and Doctor's Fees, J. S. White; Ureteral Fistula, L. L. McArthur; and Reports on various branches.

Lectures on Obstetric Nursing; Delivered at the Training School for Nurses of the Philadelphia Hospital, by Theophilus Parvin, M. D., Professor of Obstertrics and Diseases of Women and Children, at Jefferson Medical College; Obstetaician to the Philadelphia Hospital. 12mo. Cloth, price 75 cents. P. Blakiston, Son & Co. Philadelphia, 1889.

While this little work is adapted more especially to

the wants of the nurse, still the physician who desires that his obstetrical patients should have the most judicious care and attention, as well as the best of hygienic, dietetic and antiseptic conditions may gain much from its pages, and in turn inbue his nurse with the ideas and precepts thus acquired

Among the points touched on, we note the following: Special responsibility and qualifications of the obstetric nurse; her duties before, during and after the labor. Sepsis, antisepsis, septicæmia; premature discharge of the waters; delivery of the child and placenta by the nurse, in the absense of the doctor; attention to the infant; use of catheter, etc., etc.

The book well fills the position aimed at by its author.

I. The Tratment of Syphilis at the Present Time. By Dr. Maximilian von Zeissel. Docent of the Vienna University.

II. The Treatment of Inebriety in the Higher and Educated Classes. By James Stewart, B.A., Member of the Royal College of Physicians, England; Licentiate of the Royal College of Surgeons, of Ireland; Fellow of the Medical Society, of London; Member of the Medico-Psychological Association,and of the Society for the Study of Inebriety; Formerly Surgeon in the Royal Navy.

III. Manual of Hypodermic Medication. By Drs. Bourneville and Bricon, of Paris. Translated from the Second Edition, with Additions, by Andrew S. Currie, M.D., Edin., Fellow of the Edinburgh Obstetrical Society, etc.

Wood's Medical and Surgical Monagraphs. Vol. 3, No. 2, August, 1889.

I. In the monograph on the treatment of syphilis, Prof. Zeissl discusses, not only the mutations in the treatment of this disease, with regard to the different preparations of mercury and iodide, and the methods that have been introduced lately; but the views of writers who have called into question the advisability of prescribing mercury at all, are given attention. The author himself uses the iodide earlier and more freely than it is customary with American physicians, we believe. Nevertheless, good reasons are furnished for this course.

II.—The Treatment of Inebriety.—With an experience of over twelve years in the treatment of inebriates, Dr. Stewart is well qualified to produce a valuable contribution on the above subject. That he did so was demonstrated by the attention which his paper attracted when originally delivered before the Society for the Study of Inebriety. In preparing it for publication it has been revised, and in its present form occupies thirteen pages of the August issue of Wood's Medical and Surgical Monographs. He lays down in a lucid and persuasive style, the pathological basis of the disease of inebriety, and shows how experience has taught him that the brain of the inebriate is as truly injured as his finger would be if he sliced off the top while cutting a loaf of bread. In the latter case he would bind it up so as to exclude from the wounded surface what would interfere with its recovery. So the brain in its injured condition must be appropriately treated. In a well-managed home, from which all intoxicants are excluded-under careful supervision and proper treatment, which he specifies, Dr. Stewart considers an average case may reap permanent benefit in a year.

III.—Manual of Hypodermic Medication.—Those who understand the hypodermic method of administration of medicines as being restricted to a limited number of drugs will be surprised at the information conveyed by the above work, which now appears in this country, occupying 238 pages of the August issue of Wood's Medical and Surgical Monographs. In it the authors treat of over one hundred drugs that have been administered hypodermically in diseases. The main body of the Manual consists of articles on the various drugs arranged in alphabetical order. The physical properties of the drug are first described, then its physiological effects and antidotes, next formulæ which have been employed are given, and finally the therapeutic uses are indicated. The authors confess that many of the formulæ included in the Manual must, for various reasons be abandoned, but consider they deserve notice in a work so complete, if not for their historic interest, for the reason that their mention may assist future investigators. The practical value of the work is increased by the addition of a therapeutic index based on those contained in the well-known works of Dr. Ringer and Dr. Lauder Brunton. A table of antidotes and antagonisms, and a posological table, make the work the most complete and accurate of its kind. Readers of the present edition will enjoy the advantage which a careful revision and rearrangement by Dr. Chas. Rice has afforded, such changes and additions having been made as were calculated to adapt it for use in this country.

CORRESPONDENCE.

A CASE OF SENILE GANGRENE.

Sharon Georgia,
Aug. 23, 1889.

Rhoda Ivey, æt. 81 years, was attacked some time in March, 1889, with a severe pain in the second toe of the left foot.

Pain, without swelling or fever, continued for several weeks when the great toe, together with the other toes on the same foot, became involved, causing her pain unceasing and almost unbearable nothwithstanding the free use of anodynes.

About the time the other toes began to become involved, the toe first attacked gave evident signs of

approaching death, by shriveling and turning a mouldy black.

The diagnosis of senile gangrene—which disease had all along been suspected—was now confirmed.

Notwithstanding the great pain and much restlessness there was no fever—the temperature remaining a little sub-normal, no redness, no swelling, and not much soreness upon pressure,

The pulse, however, was very small, highly compressible, occasionally intermitting and quite frequent—varying from 110 to 120 per minute.

All along the old woman retained a remarkably fine appetite. She would exclaim, "Yes, doctor, I can eat anything they will bring me."

Gangrene progressed slowly until about the first of August, when a line of demarkation was very irregularly but distinctly formed around the foot near the instep.

It was now deemed best to amputate, nothwithstanding her great age and feebleness.

This the writer did, aided by one regular physician, and a druggist, on the 10th of August, cutting a little below the knee joint, or about the junction of the upper and middle third of the tibia.

So far the writer has reported nothing very unusual or remarkable in a case of sinile gangrene.

It was noticed when the cutaneous and sub-cutaneous tissues were being divided, that only a very little, very black, thin, water-like blood escaped.

The writer finding it somewhat difficult to find the main arteries—the posterior tibial and the peroneal—for ligation, had the tourniquet loosened, when to our great surprise, no blood flowed.

We removed the tourniquet, entirely and rubbed the limb downward but not a teaspoonful of blood could we make to flow—the flesh on the stump looking as bloodless as a piece of steak in the market.

We decided not to cut above the knee; and completed the operation without applying a ligature!

The woman recovered promptly and fully from the influence of the anæsthetic—chloroform—and lived three days and thirteen hours, retaining all the while her mental faculties unimpaired, until within six hours of her decease.

A little fever set in during the morning of the third day and ran very high just before death, the temperature raising a little above 106° F.

At no time during the three days was the dressing about the stump more than slightly stained with blood.

Mr. Editor: Can you explain the cause of the exsanguineous condition of the limb?

Could there have been an obstruction within the popliteal or femoral somewhere along its course?

Could a thrombus have caused it?

Could an hypertrophy or thickened condition of the walls of the artery somewhere along its track, or throughout its entirety, have occluded the free circulation?

If such a condition existed how could warmth and nutrition of the limb be sustained—above the line of demarkation?

Could a greatly unfeebled condition of the heart explain this bloodlessness of the leg?

We had no opportunity of examining the veins and arteries of the amputated part, nor were we allowed an autopsy.

There was no history of the traumatism involving any part of the limb.

The urine was normal—at least there existed no glycosuria.

The right foot and leg seemed to be in a normal condition.

The pulsation in its arteries could be distinctly felt as low down as the instep.

This was not the condition with the diseased limb. We could not discover any pulsation anywhere, even as high up as the beginning of the femoral.

Doctor C. L. Kendrick and Mr. Geo. W. Brown, druggist, both of Sharon, assisted the writer in the above operation.

ARTHUR C. DAVIDSON, M. D.

[In endeavoring to answer the questions in the above extremely interesting communication, we are impressed with the difficulty of giving a reliable solution of the problem, since no post-mortem examination was allowed.

In our opinion, however, the most probable hypothesis is the following: That, instead of its being a case of senile gangrene, purely, the process had some localized origin; because if it were senile sangrene and of such a rapid and extensive character as to involve the whole foot in the short time occupied, it would most probably have attacked the other extremity, at least to some extent.

Since it was dry gangrene, it must have been from interference with the arterial supply, and as it evidently cut off the blood from the whole or most of the limb, the obstruction was in all probability in the femoral.

It came on gradually, hence a thrombus is inferred. The limb was not completely cold because the obstruction was not complete until the tourniquet stopped the blood-flow within the artery, and in that way allowed of complete clotting, preventing any blood-flow when the instrument was removed.

Had the Doctor tested with the thermometer before operation, he would probably have found a difference in the temperature of the two limbs.

Death, we suspect, was from septicæmia—not necessarily from absorption through the surgeon's wound, but by absorption of septic matter from the limb, decomposing *en masse.*

Some localized atheromatous change may have given a start to the formation of a thombus.]

HOW TO REMOVE INK AND RUST STAINS.—Ink and rust stains are easily removed by a solution containing ten parts each of tartaric acid, alum and distilled water. The solution has the trade name "encrivoir."—*Pharm. Ztg.*

SOCIETY NEWS.

PRELIMINARY PROGRAMME OF THE AMERICAN PÆDIATRIC SOCIETY,

Organized in Washington, D. C., September 18, 1888.

The meeting will be held at the Army Museum Building, Washington, D. C., on the 20th and 21st of September, 1889. One of the afternoon meetings will be held in the Johns Hopkins Hospital, Baltimore, Md., by invitation of the director of the hospital.

PAPERS.

Address by the President, Dr. A. Jacobi.

A. D. Blackador, Montreal: Notes on a case of Ataxia in a child of ten years.

W. D. Booker, Baltimore: A study of some of the Bacteria found in the dejecta of infants afflicted with summer diarrhœa.

Dillon Brown, New York: Noisy respiration.

A. Caillé, New York: Prolapsus recti due to large stone in the bladder in a girl three years old.

Two cases of Nystagmus associated with choreatic movements of the head in rhachitic babies.

Septic Diphtheria with unusual sequelæ.

Personal Prophylaxis in diphtheria.

Charles Warrington Earle, Chicago: Subcutaneous Emphysema in children.

The necessity of prolonged rest after some attacks of Diphtheria.

Two cases of carpo-pedal contraction.

J. Henry Fruitnight, New York: The treatment of Scarlet Fever and its complications.

Francis Huber, New York: Spurious Meningocele.

Double Empyema.

A. Jacobi, New York: Aneurism in early life.

John A. Jeffries, Boston (by invitation): A contribution to the summer diarrhœas of infancy.

H. Koplik, New York: Tuberculosis of the testis in childhood.

Thos. S. Latimer, Baltimore: Cases of Spastic Paraplegia.

I. N. Love, St. Louis: Scarlet Fever.

Arthur V. Meigs, Philadelphia: The Artificial Feeding of Infants.

W. T. Northup, New York.

J. O'Dwyer, New York: Cases of Diaphragmatic Hernia, with operation.

The apparent physical contradiction involved in the reinflation of a collapsed lung while an opening remains in the pleural sac.

Wm. Osler, Baltimore: A case of simple Muscular Atrophy of the facio scapulohumeral type.

Cerebral Sclerosis in children.

A. Siebert, New York: Diphtheria.

J. L. Smith, New York.

H. N. Vineberg, New York: Some practical points on the diagnosis and treatment of malaria in children.

V. W. Vaughan, Ann Abor.

A. Jacobi, President.

Thos. L. Latimer, Chairman Com. Arr.

Wm. D. Booker, 821 Park Ave., Baltimore, Md.

SELECTIONS.

THE FORCEPS AND THE PERINÆUM.

The correspondence, extending over some months in the *Journal*, on laceration of the perinæum and the use of forceps shows that the subject is one of widespread interest. The questions that immediately present themselves are: (1) what are the conditions that dispose to and cause laceration of the perinæum from the labor apart from operative interference? (2) Are lacerations more, or less, frequent under the operative treatment, especially the use of forceps.

The first impulse is to seek a solution in statistics; but ever so little reflection will prove that the key cannot be found in any methematical method that can be applied. It is all but impossible to marshall complicated facts in such homogeneous groups as will admit of scientific analysis and comparison. As one instance of the fallacy of such a method in the present discussion, we have only to reflect that in labors affected by natural forces, the presumption is that the expelling and resisting forces were harmoniously balanced, and in that labors effected by natural forces, the presumption is that the expelling and resisting forces were harmoniously balanced, and that in labors effected by the aid of the forceps these forces were not well balanced. Therefore it may be inferred that it is not simply the forceps that make the difference, nor must we forget that skill in the operators is a variable quantity. The chief predisposing causes of rupture may be traced to fault in the driving power, to faulty condition of the pelvis, to malposition or excessive size of the child, to faulty conditions of the perinæum. The driving power may be turbulent, in excess. One way of producing this is by giving ergot. This, of course, should be avoided. Violent impulsive forces may be provoked by undue excitation of reflex action by injudicious examination. Tyler Smith showed that even rupture of the uterus has been caused in this way. The best way of moderating excessive action is perhaps by inhaling chloroform. There are two conditions of the pelvis which dispose to laceration. One is a narrow public arch which throws the child's head backwards upon the perinæum; the other is a too sharply-curved sacrum, with loss of mobility of the coccyx. In such cases the forceps or even craniotomy may be called for; and even if the forceps be used with the utmost skill, the perinæum may give way.

In the case of the excessive size of the child the perinæum is obviously in danger, whether the forceps be used or not. If there is a reasonable prospect of delivering a live child, and the labor is arrested, there is a clear indication for resort to the forceps. Granted a normal presentation, by judiciously seconding the natural movements of progression the forceps may save the perineum. Two rules have to be observed. The first is to imitate or assist the alternate lateral movements of the head by gentle oscillation or pendulum action of the forceps, and

by traction in the axis of the pelvis, only carrying the handles forward over the woman's belly when the occiput is so far engaged in the outlet as to permit of full extension of the head and rotation in Carus's curve. In this way strain upon the perineum is minimized; and this manœuver is greatly assisted by "supporting the perinæum." Applying the open hand in such a manner as to make it extend the coccygeal plane and push forward the perineum, the head is guided under the pubic arch. Thus three forces—gentle lateral leverage of the head, traction, and gradual longitudinal leverage, that is force *a fronte*, and supporting and pushing the head from below—all act concurrently in moulding and directing the head.

In this way undoubtedly the perinæum may be saved. A more serious case than even a large head is the occipito-posterior position. In this possition, the occiput, instead of being gradually moulded in the sugar loaf form under the pubic arch, remains broad and flattened back upon the shoulders. The strain upon the perinæum is enormous and the pressure bears in excess upon the posterior portion, behind the fourchette. In such cases, as some of our correspondents have shown, the laceration begins at the anus, or with a perforation through the perinæum. Here the forceps is the true scientific help. By drawing the chin under the pubic arch, the face is made to revolve in Carus's curve, and the occiput made to follow: the base of the vicious wedge formed by its being jammed back against the shoulders is decomposed. Rupture almost unavoidable without the forceps, may possibly be averted by its help. But much depends upon the choice of good forceps. The single-curved forceps is not to be trusted. Our text being simply how to save the perineum, we have strictly to consider the only cases in which the head has entered the pelvic cavity. For such cases Simpson's forceps will commonly answer. But as it is not desirable to carry two instruments where one will do the work, and as Sampson's is too short to seize the head above the brim, or even high in the pelvis, it is best to trust to Barne's forceps, which seems to be now the one in most common use. The blades fit well on the head, the shanks between fenestra and handles are long enough to admit of locking outside the vulva; it entails the minimum of stretching of the perinæum, and the long lever, giving full power, admits of nice graduation and accurate direction of the nacessary force. The length of the instrument further facilitates the use of the hands alternately or together, thus increasing the command of the operator, not alone in nice regulation of tractile force, but by making a fulcrum on the shanks with one hand whilst leverage and traction forces are applied to the handles, the mother's parts are saved from undue pressure, and the advantage of axis-traction is obtained. Not so well, however, as by Tarnier's axis-traction forceps, an instrument which has obtained in this country the vogue it eminently deserves.

Lastly, there is the condition of the vulva itself. It may be unduly resisting, or the head may be driven through too violently before the perinæum has had time to soften and dilate. Stormy precipitate labor is very apt to involve laceration. Another condition is a vulva too small and rigid. In such a case, if it be felt that larceration is impending, it is good practice to widen the outlet to relieve the spasmodic constriction by moderate lateral incisions, thus substituting the precisely limited aid of the surgeon for the unrestrained violence of Nature.

Lacerations of moderate extent are much more frequent than is commonly believed. Unless specially looked for they may easily escape notice. When recognized, the practical question arises: What is to be done? Slight rents are best treated by placing in the fissure a bit of lint soaked in solution of chloride of zinc. This guards against septic absorption, and cicatrization is promoted. If the rent is extensive, reaching to or invading the sphincter ani, it is the best to repair by sutures at once. But the operation must be thorough. If the parts have been much contused, crushed, during labor, primary union may be defeated, and perineorrhaphy must be deferred until after the puerperal period. This operation is now so successful that the accident of laceration has lost much of the terror it too justly inspired when, before the days of Charles Brooke, this injury was regarded as an opprobirum chirurgicorum. Is it necessary to add a word of caution as to the tendency to rush too hastily to the forceps? Correspondents differ upon this point; some perhaps resorting to it too readily, hardly giving Dame Nature a fair chance, others trusting her too much. In first labors in young women, patience is often better than the forceps. When to interpose must greatly depend upon the judgment and experience of the surgeon.—Ed. *Br. Md. Jaur.*

MASSAGE AND PELVIC GYMNASTICS FOR PROLAPSE OF THE UTERUS.

By Alfred J. Smith, M. D., in *Med. Press and Circular.*—I venture to bring forward a system of treatment which I have been employing in cases of prolapse for a long time past at the Rotunda Hospital. The technique of this special treatment consists of—(1), in the lifting of the uterus; (2) in the massage of the uterus and its ligaments; (3) in the forced separation and forced closure of the knees; and (4) in tapotement of the lumbar and sacral vertebræ.

1. Lifting of the Uterus.—The patient lies in the lithotomy position on a low couch, with her clothes loose about her hips and corset open; the bladder must be empty and abdominal walls relaxed, an assistant sitting to the left of the patient, replaces the uterus bimanually and maps out with his external hand the position of the fundus. The operator, facing the patient, rests his left knee on the couch, his right foot on the floor, then lying his hands flat on the abdomen, with finger tips turned towards and almost touching the pubis—which organ is prevented from being pushed into the sacrum by the assistant's finger in the vagina. Now leaning over the

patient, the assistant at the same time removes his external hand, the operator raises the uterus gently and slowly in the axis of the pelvis as much as over its normal level as it formerly had been prolapsed. When the uterus has been elevated sufficiently to put on a stretch the relaxed parts, it is allowed to slip gently from between the hands, and sink slowly into the abdomen. The assistant's duty is now to receive the uterus as it decends on his finger—which has remained in the vagina—and keep it in a condition of anteflexion. This lifting of the uterus must be repeated four times in a daily sitting, a few minutes interval being allowed between each, during which the assistant gently massages the uterus. The elevation must be done gently, hence it is advisable and necessary to constantly watch the patient's face for the slightest expression of pain. By elevation the vagina, the uterine ligaments, the peritoneum, with its unstriped muscular fibre, the nerves and blood-vessels are all stimulated; the mechanical irritation causes not only a retraction of the involuntary muscle fibre, starting at a point of irritation, but induces a long continuous contraction. When daily practiced this artificial exercise has the effect of natural movement, developing relaxed and weakened structures, restoring them in a marked degree to their original healthy condition; and furthur, any band or adhesion which may have formed between the uterus and neighboring organs are either relaxed or wholly separated.

2. Massage of the uterus and its ligaments is performed during the pause of some minutes' duration, which follows the lifting of the uterus. It consists of stroking movements applied to the fundus of the uterus in the direction of the internal os. In order to stimulate contractions and empty the numerous distended veins, massage is generally performed by the assistant's external hand, the finger in the vagina being used only as a support to elevate the part against the abdominal walls and fix it there.

3. Forced Separation and Forced Closure of the Knees.—The patient being still in the lithotomy position, should close her knees and thighs, and elevate the sacrum from the couch, supporting the body weight on the elbows and feet only; then the operator seizes the knees and forcably abducts, while counter resistance is offered by the patient. The contrary movement is now practiced—the patient lies with knees widely separated, and while she forcably closes her thighs the operator performs forced abduction. This combined action generally performed from three to six times during each sitting, it especially aims to the development of the muscles of the pelvic floor—more particularly the levator ani—and that it powerfully stimulates this muscle any person can demonstrate for himself.

4. In tapotement the lumber and sacral vertebræ are percussed several times with the clinched hand. Thure Brandt considers that it acts by stimulating the nerve of the true pelvis, thus aiding in the restoration of the uterine supports. It is an exercise which did not commend itself to me, consequently I did not practice it.

The duration of these four exercises—which are performed at one sitting—is from fifteen to twenty minutes, and should be repeated daily for a period of from two to eight weeks. The sitting having concluded, the patient turns on her face, and remains in that position for about ten minutes. The importance of regular attendance during the period above specified must be impressed on the patient, who perhaps, feeling her condition improved, is apt to become irregular in her attendance. A caution must also be given against going up flights of stairs or lifting heavy weights.—*Arch. of Gyn.*

LACERATION OF THE PERINÆUM.

H. S. Griffin, M. D., in *Can. Pract.*, says that from his experience, he would judge that about thirty per cent. of primipara suffer from lacerations. It is supposed that lacerations are more frequent among civilized nations, owing to the fact that the enlarged fetal head—due to the cultivation of intellect and improvement of the mental faculties of the race—is not accompanied by a compensating enlargement of the female pelvis. Among the causes of laceration are: From the side of the mother—anomalies of the pelvic outlet, projections of the sacral vertebræ,anomalies of the sacral curvature, capacious sacral hollow, deep symphysis, anomalies of the axis of the rami, ankylosis of the sacro-coccygeal joint, anomalous pelvic obliquity, rigidity and alterations and abnormalities of the soft parts. Furthur factors are the age of the patient, want of elasticity in the perinæum, and disproportion in the size of the fetal head and the maternal parts. As regards the child, a small head is more liable to cause laceration than a large one, as the latter decends more slowly and gradually stretches the parts. The laceration, however, is often caused by the shoulders. The direct causes are precipitate labor, retarded labor, or the injudicious use of ergot and the forceps.

Speaking of the means of preventing rupture, the author deprecated the old-fashioned plan of greasing or supporting the perinæum. The only means to be regarded as rational are those directed towards retarding a too rapid labor, and giving the parts time to gradually dialate. In this connection, the forceps, when skillfully and properly used, afford us the best means or controlling the course of the labor and safely guiding the head over the pelvic floor. They should be applied accordingly when rupture is threatened, and in no case should they be removed until the head is fully born. Anesthetics are doubtless useful, but incision must be condemned. In regard to manipulating and kneading the perinæum, the best plan is: placing the left hand over the patient's right thigh, and with the palm turned towards the child's head, pressing the labia together by means of thumb and middle finger.

In regard to the treatment of a tear, if it extends through the sphincter ani and involves more or less of the recto-viginal septum few would oppose an immedi-

ate operation. In the case of incomplete lacerations, however, considerable difference of opinion and practice prevail. The tendency of the time it may be stated, is towards an immediate operation, as the parts are be numbed and comparatively insensitive at the time, and it is simply proven that restoration of the perinæum favors involution of the vagina. The dangers of septicemia are also much lessened by the immediate operation.

Of the many varieties of secondary operation the author expresses a strong preference for Tait's flap, or splitting operation, as it is simple, scientific, and easy of performance. The reader of the paper here showed a jointed needle which he had devised to overcome the difficulty of passing the ordinary curved needles —*Arch. of Gyn.*

HEMORRHOIDS—WHITEHEAD'S OPERATION.

G. S., æt 43 years, seven months previous to admission had a severe attack of biliary colic terminating in a copious hemorrhage from the bowels. This was shortly followed by the development of a circular mass of hemorrhoids protruding from the anus at each stool, bleeding profusely and causing considerable pain and annoyance. The following operation was performed on October 31:

The patient being etherized and placed in the lithotomy position the sphincters were paralyzed by digital stretching, the thumbs being introduced into the anus, back to back, and then carried forcibly towards the tuberosities of the ischium, the dilatation being thus made as complete as possible. The hemorrhoids with the whole area of mucous membrane giving rise to them, the so-called "pile area," were thus made to prolapse, after which the macous membrane was completely divided just within its line of junction with the skin, the "white line" of Mr. Hilton. The membrane was then carefully separated from the external and internal sphincters by means of scissors aided by dissection with the fingers, the separation being affected close to the surface of the muscles. In this way the whole circle of mucous membrane, bearing with it the hemorrhoidal tumors, was freed from its connection until it could be drawn down outside of the anus. It was then divided circularly just above the upper limit of the piles. This division was made by means of scissors, and in sections of about one-third of an inch, each portion so cut being immediately stitched to the free edge of the divided skin. It was begun at the posterior or lower margin of the anus so that the area of the operation should be as little obscured by blood as possible. It was carried around the whole circumference of the bowel in this manner, so that when the operation was complete not only the hemorrhoids, but also that portion of the mucous membrane of the lower part of the rectum in which they originate, were entirely removed. A circular wound was left, the free edges of the skin and mucous membrane being united by stitches as after circumcision. A few vessels required to be twisted and one or two ligitures were applied. Carbolated silk was used for the stitches. The wound was dusted with iodoform. A suppository of one-half grain of extract of opium was inserted into the rectum; a compress of salicylated absorbent cotton dusted with iodoform was placed against the anus and a t-bandage was applied; the patient was kept in bed in a supine position; the bowels were confined by means of opium and concentrated diet for a week, after which a dose of castor oil was given. There was no fever and but little pain. Union by first intention followed through the whole wound. Most of the silk sutures were discharged at the time the bowels were opened and the patient's cure was complete in about twelve days.

Remarks.—Mr. Whitehead has now performed this more than 300 times, not only without a death but without abscess, incontinence of urine, stricture, or any alarming symptoms having occurred. It is claimed that the operation is not only less dangerous and less painful, but also much more thorough than the old operations by the ligature or by the clamp and cautery. It is thought that by removing all that portion of the mucous coat of the bowel in which the veins have become enlarged and weakened that the possibility of recurrence is done away with. On the other hand it is stated in favor of ligation that no blood whatever is lost, while hemorrhage seems more likely to occur after excision; that no fresh raw surface is exposed in a region which it is very difficult to keep aseptic; that the results are almost if not quite as good; and that the danger of subsequent stricture of the lower end of the rectum or anus is considerably less, at least in cases in which an entire ring of hemorrhoids is not ligated. Whitehead's operation may be said still to be on trial before the profession. I may add, however, that the only case of stricture at the anus which I have seen lately, resulting from an operation, followed the ligation of a hemorrhoidal mass which completely encircled the anus. As to statistics it is undoubted that there are occasional deaths from tetanus following the ligature of piles. I know of three unreported cases which have occurred in this city alone. It remains to be seen whether—as large numbers of practitioners adopt and perform the Whitehead operation—its statistics will remain as good as at present.—Dr. J. Wm. White, in *University Mag.*

DYSMENORRHEA.

F. W. Abbott, M. D., in *Mass. Med. Jour.*—In but few diseases in the treatment so empyrical, and few offer a more promising field for rational, well directed effort. In all the indications are two—the relief of present pain and the removal of the condition upon which the pain depends. As general measures to hasten the flow and relieve pain we would mention rest in the recumbent position—the so-called postural treatment—hot pediluvia, hot cloths to the vulva, hot hip-bath, and vaginal injections, warm drinks, and the use by the stomach, rec-

tum, or areolar tissue of such anodynes as the medical attendant may elect. Hayden's viburnum compound or mist. helonin comp. in teaspoonful doses four or five times daily will often relieve a severe dysmenorrhea. In all cases attention must be paid to the general health. Diet, exercise, baths, freedom from care, in short, a well regulated life, are all conducive to the general good. For the anemic and phthisical, iron, the simple bitters, and those medicines promoting constructive metamorphosis, will prove useful; while for the rheumatic and presenting evidence of malarial toxemia, colchicum, gauiacum, salol, cimicifuga, racemosa, quinine, and hydrastis will be necessary. The bowels should be well regulated, and as an hepatic stimulant we prefer the following;

℞ Ext. chionanttii virginiana, - fl℥j.
Ext. cascara sagrada, - - fl℥ij.
Cansera cordialis ad, - - ℥iv.
M. S. Teaspoonful as required.

The skin and kidneys should be kept active, and in urinary suppression pilocarpine hypodermatically and potassic bitartrate internally, act admirably. Water in copious draughts is, I believe, one of the best diuretics. The evils of masturbation, continence, unnatural and excessive intercourse and sexual errors should be avoided. Indulgence during the week preceeding the menstrual period should be interdicted, and quiet enjoined. The influence of the physician in securing more rational, practical education and in abolishing the existing, pernicious, high-pressure systen should be exercised; and the moral element should be more cultivated. In these matters the practical, scientific, conscientious, discreet physician will so conduct himself as to show that beyond question our honorable profession is not only equal but vastly superior to all other callings. In many cases local treatment will be necessary. An imperforate hymen must be incised; viginal strictures and cervical stenoses, overcome by dilation and incision; displacements rectified and external support given by a properly adjusted abdominal supporter; morbid growths extirpated and ill-fitting pessaries removed. Though convinced that the "obstructive" theory is not so important as considered by some authorites, and that flexions are not omnipresent, yet in view of the decided opinion to the contrary of so competent an observer as Hewitt, it were well to recognize their possible influence and direct our treatment accordingly. "The 'obstructive theory,' " says this eminent author, "applies widely and generally to most cases, those not coming within it constituting the exceptions;" and again, "All cases of dysmenorrhoea are not due to flexion, but the vast majority of them come under this category: marked dysmenorrhea will, unless in a very few and exceptional cases, be found associated with undoubted flexion of the uterus." If pronounced flexion be found to exist, it should be corrected by proper pessaries; and the sound may be used now and then to straighten the organ. Constriction may be overcome by two methods; dilatation and incision. The former may be accomplished by graduated sounds, sponge, tupelo or laminaria tents; or by dialting instruments. The latter may be affected either by the bilateral method or by the antero-posterior. Whether we dialte or incise, the success of the operation will depend upon the consequent maintenance of dilatation, for which purpose the glass plug should be inserted and worn for some time. Cold baths during menstruation and cold water injections after congress should be strictly prohibited.

As special therapeutical measures may be mentioned, apiol in five grain capsules three times a day during menstruation, five grain rectal suppositories of iodoform night and morning. Canabis indica tincture in twenty drop doses every four hours; ten grain doses of chloral hydrate are indicated; five grain doses monobromate of camphor, bromide of potassium and hyoscyamus. Oxylate of cerium, six grains every hour till relief is obtained has been recommended in those cases frequently occuring in fleshy and robust women with scanty discharge, in which the pain comes on before the flow, or at its commencement, is spasmodic or colicky, accompanied by feeling of tenesmus, and is relieved when the flow is thoroughly established and when the pain is strictly that of dysmenorrhea. Dr Biggers finds nothing equal to a combination of cypripedium, gelsemium, and viburnum opulus, in equal parts, to which he adds an equal quantity of syrup of wild cherry, giving a teaspoonful every hour or two till relieved. Little can be said on the treatment of membranous dysmenorrhea. Hewitt cured cases by dilating the cervical canal, curetting the uterine cavity, and injecting Churchill's tincture of iodine; while Fordyce Barker favorably reports the use of iodoform ointment, two or three grains to the amount introduced.—*Arch. of Gyn.*

Signs of the Moribund Condition.—1. In general the signs of death that are the most trustworthy appeal to the eye.

2. Among these the respiratory function holds the first rank, both in cases of coma and asthenia, more noticeably when the two modes of death are blended.

3. The death by coma represents, in duration, the longest period.

4. The most valuable sign of inevitable dissolution is the up-and-down movement of the pomum Adami, always providing that it be persistent.

5. Temperature-changes deserve recognition, particularly when the curves are sharp, high and continuous, or when they are below normal.

6. An intermittent pulse is an early sign of death, especially when not due to any disturbed action of the nervous system. The qualification necessary to save this statement from being absolute, lies in the fact that occasionally individuals are found who maintain this peculiarity through a long, healthful life.

7. Deaths from syncope are too sudden to allow much observation or study.—John Shrady in *Med. Rec.*

ORIGINAL ARTICLES.

HYPNOTIC SUGGESTION AND ITS TECHNIQUE.

BY BENNO VON STEINMETZ, M. D., ST. LOUIS.

I do not intend to write a dissertation on hypnotism, nor explain the phenomena itself, but I wish to call attention to this very important, and, in America, much neglected aid in the treatment of disease. My experience is not extensive enough, to claim for this means of treatment the results obtained by the masters in the old world, but the short time which I have devoted to it has enabled me to perceive its advantages. My success in some cases, coupled with the fact that no work in the English language exists on the subject, has led me to write the following pages, in preparing which I have received material aid from the works of Bernheim, Charcot and Baierlacher, and I hope that they will receive the kind attention of the profession.

The novelty of treatment by suggestion and the complete deviation from the common routine treatment are the reasons why some patients look with suspicion upon the proposition of the physician to relieve their sufferings through this agent, and refuse to be treated by it. The greater majority of patients, however, will submit to the influence, if they are told that there will be no injurious sequelæ, that they will feel no worse on awakening, and that if hypnotic sleep can be produced, they may possibly be cured, or at any rate greatly benefited by it. Bernheim recommends as an effective means to convince such obstinate patients of the harmlessness of the procedure, to hypnotize another patient in their presence.

The position in which the patient is best hypnotized depends on circumstances. If the patient comes to the office, he is best placed in a reclining easy chair, to facilitate sleep; if he is at home, the act is best performed in the recumbent position in bed. The main point to be observed in hypnotizing is to bring the subject into such a position that he will be aided in falling to sleep.

Two methods of producing the hypnotic sleep are employed; Braid's method, which consists in having the patient fix his eyes upon a shining object, a polished metal surface or ground glass, for a longer or shorter period, until the gradual fatigue of the optic nerve will produce hypnotic sleep in some persons. This method has its drawbacks, because by the constant fixation of the gaze on a polished surface, an over excitation of the nerve centers may be occasioned, which as has been observed in several cases, is followed by headache, vertigo, and convulsions.

For therapeutic purposes the method advocated by Liebault and Bernheim, of Nancy, is indicated, in which the hypnotic sleep is produced by suggestion. This method has the decided advantage, that it is entirely harmless, and that none of the disadvantages above mentioned are induced. This manner of suggesting sleep has the greatest similarity to lulling a baby to sleep. As a mother would say to her child: "Baby, close your eyes and go to sleep," which is generally successful, we must in like manner picture the sleep to the grown patient. We begin with that part of the body which in falling to sleep is first affected, the eye. Bernheim tells the patient to fix his eyes on two of the operator's fingers, at the same time he suggests sleep in the following words: "Your eyes grow dim, the eyelids feel heavy and are closing; they are completely closed now, and cannot be opened again, you feel a heaviness in your arms, and in your limbs, your hands are motionless, your perception is gone, sleep is coming," and in most cases the hypnotic sleep is then an actuality. To produce the hypnotic sleep, however, it is not necessary in all cases to adhere closely to the foregoing sentences; all that is necessary is that we speak to the subject of sleeping, and if possible in a dozy and sleepy voice. We must always keep in mind that the desired object is to produced sleep and nothing else, and in most cases the hoped-for result will be accomplished. Every physician using this treatment will formulate his own method of proceeding, and here, as in everything else, practice makes the best teacher.

The majority of persons are easily hypnotized, or at least placed in a kind of stupor, which makes them susceptible to suggestions. Some are not so quickly brought under its influence, while in a minority of cases only, the experiment fails altogether. When I first began to experiment with hypnotism, I failed to produce sleep, although I tried it on a great many persons, beginning in my own family. I nearly gave it up, thinking that I could never succeed, when on a Sunday afternoon, a boy, æt. 12 years, accompanied by his father, came to my office to have a sebaceous cyst removed from his scalp. "This is my last chance," I thought, and placing the boy on the operating chair, in a comfortable position, I began to speak to him of sleeping, told him that he would go to sleep, and at last I succeeeed in my object. I kept on speaking to him, telling him that I would remove the cyst and that he would not feel any pain during the operation. I then made an incision into the tumor and removed it, talking to the boy all the while, sewed up the wound and then told the patient to wake up. He opened his eyes and looked astonished when I told him that the operation was ended. He assured me that he had not felt a particle of pain and could only be convinced that the ordeal was over by my showing him the tumor and the suture-line.

There is an old adage that nothing succeeds like success. I experienced this after my first success, and with renewed interest and hope I continued my experiments, and succeeded in hypnotizing persons, whom I could not influence before. I attribute my former failures to lack of confidence on my part, and my later success to the establishment of that element. Since

my first success I have tried it on 27 patients, and have succeeded in influencing 16 of these. This proportion is not equal to Bernheim, who in his work *De La Suggestion et de ses Applications a la Therapeutique* has but from 5% to 10% refractory patients. But his success must be attributed largely to his greater experience. I recommend this work to all who wish to employ hypnotism and the treatment by suggestion, but it has not been translated into English to my knowledge.

The wide-spread belief that only hysterical persons can be hypnotized, or that they are more easily influenced than healthy persons, is, according to Bernheim and Liebault, completely erroneous. My own experience seems to verify their opinion, because I failed in three hysterical patients. Hysterics and so-called nervous persons, are, on account of the continual restlessness of their brains, only with great difficulty hypnotized, and many of them cannot be influenced at all. The so-called "Grande hysterie" of Charcot is an exception. Persons accustomed to subordinate their will to others are hypnotized with greater facility than those with which self-will is strongly developed. Sex does not seem to influence susceptibility to hypnotism, and men are as easily hypnotized as women; the same can be said of the difference in the age of the subject, although children are to some extent more easily hynotized than adults because their brains are used to subordination and obedience; their sleep, however, according to the observation of Bernheim, is never so profound as that of adults. If a child once overcomes the fear which some children have regarding the physician, it is an easy matter for the operator to produce sleep by 'soft soothings' to the child, at the same time closing his eyes and assuring him that sleep will soon come.

The beginning of the hypnotic sleep, as well as the first sigrs of its approach, differ with the individuality of the patient. Some subjects begin to blink after the first few words are spoken, both eyelids close and sleep is attained in a few seconds. In others we find the usual signs of sleepiness, the eyelids slowly droop, and sleep comes a little after. Others again will look for a long time straight at the poised fingers of the physician and only close their eyes and sleep after being told to do so. In some patients it is difficult to tell whether sleep really is obtained or whether it is only simulated, and only the trial to suggest catalepsy will usually clear up the doubt. Even this means will fail sometimes, because catalepsy cannot in all cases of real hypnotic sleep be obtained, as we will see later on, and the only true test is the experienced eye of the careful observer.

The fixation of the fingers or any other object, is not essential, according to Bernheim and others, but I have found it a great help in concentrating the attention of the patient, and in this way facilitating the object at hand. I use for this purpose a small horseshoe magnet which seems to impress the patient that its peculiar magnetic power is exerting its influence upon him, and makes him less resisting.

In some cases, however, it is more difficult to produce hypnotism. Bernheim suggests different expedients to overcome this impediment. Where, for instance, gentle persuasion does not succeed, he recommends to say in a commanding voice: Sleep! and often success will crown the effort. Others do not close their eyes, under the impression that they must fix them upon the fingers or magnet as long as possible; in these cases it will also often have the desired effect if the operator commands them: Sleep! and at the same time closes their eyes gently. Others, again, will need slight rubbing of the eyeballs, at the same time closing their eyelids gently and suggesting sleep.

Some persons cannot be made to sleep, but only a kind of stupor is obtained, which we may call a light slumber, and the attempt to suggest catalepsy is followed by the opening of their eyes, and the declaration that they did not sleep at all. In these cases special precaution must be taken and they must be continually addressed by the operator, because with the discontinuance of the monotonous talk they will open their eyes and the performance must be repeated. It is also of advantage to have the room as quiet as possible and to prevent any direct light from striking the eyes of such patients. With other, more susceptible persons, it is not necessary to be so scrupulous in this respect; even loud noises in the room will not disturb their sleep. Care should generally be taken to prevent any sudden loud noise like the report of a gun or the slamming of a door, because the hypnotized person may be suddenly awakened and complain of headache.

Bernheim recommends to deepen the hypnotic sleep by movements of the hands of the operator along the body of the subject, beginning at the forehead and ending at the feet.

Hypnotic sleep has been divided by Liebault and Bernheim into different degrees; Liebault has divided it into six, and Bernheim into nine different phases. Bernheim's division seems to me more to the point in acquainting the beginner with the different phenomena of hypnotism, and I have therefore made a short sketch of these divisions:

First Degree.—The subject does not show any catalepsy or anesthesia, neither does he have hallucinations nor sleep, in the proper sense of the word; he will deny having slept, and only acknowledge a certain drowsiness or stupor; and if we did not have proof that suggestions, even in this state, are effective, the influence obtained could be doubted.

Second Degree.—The subject has the same appearance as in the preceding state, the same negative condition; but it differs from the first degree in this, that the subject cannot open his eyes at will if it is suggested that he cannot do it. In this degree the influence is manifest.

Third Degree.—In this state, the subject is susceptible to suggestive catalepsy; but this catalepsy is of a variable intensity, and we must not dare him to change the given position, because by an effort of will he will break the charm and change his attitude. Suggestions are also very effective in this degree.

Fourth Degree.—Suggestive catalepsy is more pronounced, and the subject cannot of his own accord break through the spell, as in the preceding degree.

Fifth Degree.—This is a deeper state of catalepsy, with or without automatic movements; in this state we can defy him to open his hand or bend his arm, and he cannot do it.

Sixth Degree.—In this degree the subject shows a certain automatic obedience; he can be told to get up and walk, and he will do so until he is told that another step is impossible for him to make, and in fact it is not possible to make him take another step. Some subjects are conscious of having slept, while others are in doubt about it, and others, again, deny having slept at all. Up to this degree the hypnotized persons are able to remember more or less plainly every word spoken to them by the operator, but in the following degree the remembrance is completely abolished.

Seventh Degree.—To this degree belong all those persons who experience amnesia, but in which no hallucinations can be produced; catalepsy, contractions, automatic movements and automatic obedience can be obtained, and that as well with closed as with open eyes.

Eighth Degree.—There is amnesia on awakening with regard to the majority of the phenomena observed in the preceding degrees; the patient is also subject to hallucinative impressions during the sleep, but there is no possibility of suggesting hallucinations after awakening.

Ninth Degree.—Amnesia on awakening, with possibility to realize hallucinations during the sleep, as well as post-hypnotic.

To this can be added that these hallucinations are more or less complete; that they can be projected upon certain special senses and not upon others; for example, upon the olfactory and auditory sense and not upon vision.

With many persons the most complicated hallucinations are realized to perfection.

Numerous other degrees could be established, founded upon the mental power of representation of each subject, but for general purposes those enumerated will suffice. Suggestive anesthesia and analgesia, more or less complete, may be encountered in all stages of hypnotism, but is generally more frequent and more accentuated in the latter degrees, those of profound somnambulism.

Any one who employs hypnotism practically will be surprised at the kaleidoscopical variety of manifestations appearing in different individuals under its influence.

For therapeutic purposes, it is of importance to not only deepen the hypnotic sleep of the patient, but to increase the suggestibility of the same, to subjugate his willpower and imagination to our own, and by this means cure the disease.

To obtain this result it is indispensable for the hypnotizing physician to try and produce all the different phases of the hypnotic sleep in his patient, as this will effect the supremacy of the physician's will over that of the patient. To produce catalepsy, we elevate the arm to almost any position, and we will often see it remain in the given position; we may tell him at the same time that he cannot lower the arm, and in many cases the arm will not move.

We must pay special attention to that part of therapeutic suggestion, which deals with the disease itself. There are a number of diseases, which are easily cured by verbal suggestion, but there are others, where we cannot simply tell the patient that he will be relieved of his disease on awakening, and where we must employ more energetic means. A case to the point is the following:

John K., 27 years of age, working in a tobacco factory, came to me for the relief of pains in the region of his heart, and also at times painful breathing. I examined him carefully and could not detect any deviation from the normal in his lungs or heart. I proposed to cure him by suggestion, and he consenting, I hypnotized him, obtaining the fourth degree at the first seance, and suggested the disappearance of his pains. On awakening the patient felt relieved, but the next day he returned, having a recurrence of the pain and difficult breathing. After hypnotizing him again, I suggested to him in a loud voice that his pain would not only disappear, but owing to the perfectly normal state of his respiratory organs and heart, a repetition COULD not occur. It is now two months since this last suggestion was made, and up to date no recurrence has appeared, and the man feels perfectly well, whereas before the treatment by suggestion he had had continual pain for over a year, and had been treated by several physicians without result.

The success of verbal suggestion is materially increased by gently stroking and rubbing the diseased part of the body under consideration; for instance, in suggesting menstruation it is well to make slight pressure in the region of the ovaries; in neuralgia of the inner leg, to softly rub the painful place with the hand, at the same time suggesting the disappearance of the pain. In muscular rheumatism, where the pain on movement of the part is excessive, it is advisable to suggest to the patient that the movement of the part will not occasion any pain, the physician at the same time rubbing and moving the painful place or member.

A very important factor in the successful practice of therapeutic suggestion is not to try to accomplish too much at one sitting. We cannot remove headache, constipation, insomnia, and possibly some other disease in one seance, and if we try it, we will fail to remove any of the ailments. In multiple neuralgias it is best to remove the pain of one particular nerve in one sitting, and only after the desired result is obtained to attack the remaining nerves, one after the other, and each in a separate seance. In hemiplegia it is advisable to restrict the suggestion to single groups of muscles, and we must be satisfied to regain by suggestion in one sitting the use of the flexors or extensors of an arm or leg, and it would

be useless and perhaps harmful to suggest that the arm or leg which, up to the time of suggestion, had been completely paralized, should be moved and employed like it was before the paralysis. Some hypnotisers only suggest the movement of one toe or finger at one time (in cases of the paralysis of the fingers or toes), and the success which they obtain proclaims the correctness of this manner of proceeding.

In conclusion, I will say a few words in regard to awakening the patient from the hypnotic sleep. It is sufficient in nearly all cases for the hypnotiser to say to the hypnotised: Open your eyes and wake up, and in ninety-nine cases out of a hundred he will succeed in awakening the patient.

The duration of a sitting should not be extended over 15 to 20 minutes, and before awaking it is a good practice to suggest to him that he will not have any headache or disagreeable sequela to his sleep.

Hypnotism, like so many other remedies, will, on becoming more popular, be grossly misused, and its performance should be restricted by law to physicians only; but in the hands of an experienced physician and for therapeutic purposes, it is my belief that hypnotic suggestion is absolutely without danger.

CHOLERA INFANTUM.

BY J. H. M'CASEY, M. D., M. C. P. S.

Read Before the Republican Valley Medical Society, at Concordia, Kansas, July 11, 1889.

Before our next meeting many a child will be laid to rest by this dreaded malady.

A child in good health is suddenly taken down with profuse vomiting and purging. The stools are so void of solid matter as to leave no more stain on the napkins than healthy urine. The number of the stools varies from 20 to 50 during 24 hours; vomiting is almost as frequent. The tongue is dry, thirst is intense. There is no localized pain, but there is great restlessness, due to rapid failure of the vital power. The temperature is 103 to 105° F; pulse 130 to 150, feeble and compressible. The face is pallid, pinched and drawn. The eyes are almost shrunken out of sight and present a dimness that borders on opacity. The extremities become cold and the face is cyanosed, suggesting heart failure. The fluids of the tissues, by rapid exosmosis and reversed action along the alimentary canal, have been withdrawn from the system. The child in a short time is reduced almost to a breathing cadaver.

Causation is mainly atmospheric and dietetic. The heat of the summer vitiates the air and lowers the vitality of children. The mortality among bottle-fed children is very great. Breast milk is the most suitable food under 1½ to 2 years of age. Children should not be weaned during the summer months. Impure drinking water is a fruitful cause of this disease; septic germs entering the alimentary tract; ingesta of unsuitable food; previous disorder of digestion; intestinal catarrh; fermentative dyspepsia; torpidity and inactivity of the glandular system; chilling of the surface of the body due to deficiency of clothing during evenings or cold days. Teething is not a direct cause.

Pathology.—Evidences of inflammation of the mucous membrane of the alimentary canal are found after death, as well as dark spots in the duodeum and pylorus. The liver is enlarged, soft and spongy. The pancreas and spleen are engorged.

When the illness is of short duration sufficient time has not elapsed to permit those pathological changes to become marked. It is often questioned if cholera infantum is not a neurosis and identical with sunstroke. But sun stroke occurs generally in mid-day, whereas cholera infantum occurs at any hour. Intestinal inflamation is a constant lesion in cholera infantum but is unknown in sunstroke.

Prognosis is always grave. If vomiting and diarrhœa are being controlled, there being no appearance of cerebral symptoms, a favorable prognosis may be given. But strabismus and loss of parallelism in the pupils are unfavorable symptoms. Throwing back the head and crying and moaning indicate metastasis of the inflamation from the bowels to the brain; rapid failure of the vital powers, sighing respiration, and thready, irregular pulse all portend a fatal termination.

Treatment.—Empty the stomach and bowels of fermenting masses. For this purpose use calomel, rhubarb or castor oil. In the early stage use baths for the fever. Antifebrine gr. j to ij, for a child one to two years old, may be used for one or two doses for fever. In collapse or convulsion a warm bath of water and alcohol is useful. To combat internal congestions use hypodermic injections of atropia sulphate 1-300 of a grain. In consequence of suspension of absorption there is a danger of medicine accumulating in the stomach and bowels and resulting in poisoning, should absorption be suddenly re-established.

Neutralize acids with lime-water, bismuth, soda bicarbonate etc. Antifermentatives—calomel, bismuth, creosote or chalk.

Sedatives—opium, bromide of potassium or chloral hydrate; stimulants–brandy or whiskey. It is well to apply warm clothes or poultices to the abdomen; open the windows and admit plenty of fresh air. Do not press food for a day or more. When dyspepsia is present, pepsin and aromatic sulphuric acid are beneficial and should be administered for many weeks. When thirst is great, ice tied up in a rag and placed in the mouth will feel grateful, or place a spoon in ice water and insert into mouth; either will have the effect of allaying thirst without overloading the stomach.

To sum up: Calomel in doses of gr. ¼ to ½ repeated twice or thrice daily has served me well. Bismuth in large doses has been highly useful in my hands in arresting vomiting and diarrhœa. The elixir of the bromide of potassum or chloral hydrate will usually control convulsions and restlessness.

Case—Girl, æt. 18 months had vomited and purged 20 times in 2 hours, temperature 100, pulse 140. She had had one convulsion.

I gave calomel gr. ss, with antifebrine gr. jss. I then put her in a warm bath. The bath was cooled by adding cold water. This was followed by a dose of the following mixture every 2 to 4 hours:

℞ Bismuth sub. nit., - - grs. viij,
Tr. opii camph., - - - ♏ vj.
Sodi bicarb., - - - - grs. v.
Misturæ cretæl - - - - ℥j.

Sig. One dose.

Shortly after this, bromide of potasium, grs. viij in the elixir was given. The water and alcohol baths were continued with occasional small dose of antifebrine. The child had in all 4 convulsions which occurred when the fever was high. In 12 hours from the commencement of treatment the child was out of danger and made a rapid recovery.

REPORT ON PROGRESS.

THERAPEUTICS.

BY FRITZ NEUHOFF, M.D., ST. LOUIS.

I. Massage in Chronic Typhlitis and Perityphlitis.—*Med. Progress*, July 20, 1889.

II. Exalgin in Dysmenorrhœa.—*Med. Progress*, July 20, 1889.

III. Quinine in Pregnancy.—*Ther. Gazette*, July, 1889.

IV. Treatment of Herpes Zoster.

V. Treatment of Barber's Itch.—*Ther. Gazette.*

VI. Therapeutic Application of Arsenite of Copper.

VII. Treatment of Chronic Cystitis.—*Medical Progress.*

VIII. Sparteine.—*Am. Jour. Med. Sci.*

IX. Action of Pyrodin as an Antipyretic.

X. Antipyrin in Hæmorrhoidal Ulcers.—*Am. Jour. Med. Sci.*

Massage in Chronic Typhlitis and Perityphlitis.

Dr. George Huenefauth reports fifty-three cases of chronic typhlitis and perityphlitis cured by massage, hot applications to abdomen, rubbing down wtth cold water, and hip baths. The treatment was applied for fifteen minutes twice daily. The time required for a cure ranged from six weeks to four months, according to the severity of the disease.

Exalgin in Dysmenorrhœa.

Exalgin is recommended as an anodyne in neuralgic dysmenorrhœa. Its disagreeable taste is disguised by curacoa.

The *Revue de Ther. Med. Chir.*, June 1, 1889, gives the following formula:

℞ Exalgin, - - - - - grs. xl.
Curacoa, - - - - fl. ℥jss.

A teaspoonful of the above contains nearly four grains of exalgin.

Quinine in Pregnancy.

At a meeting of the Glasgow Obstetrical and Gynæcological Society held April 24, 1889, Dr. R. Park (*Brit. Med. Jour.*) reported a case of threatened miscarriage which he attributed to a dose of 15 grains of quinine. The miscarriage was averted by the use of opium.

Dr. G. M. Cameron stated that he had also met with cases of abortion which he attributed to quinine.

Dr. Miller thought quinine as well as ergot and savin had but little influence in producing uterine contractions even in the pregnant uterus, although probably in the case mentioned by Dr. Park, quinine had been the cause of the threatened miscarriage.

We are inclined to agree with Dr. Miller. We have never seen any tendency to miscarry attributable to quinine, although we have given it it many cases of malaria occurring during pregnancy. In one obstinate case we gave as much as 60 grains in 24 hours without any untoward symptoms.

Treatment of Herpes Zoster.

In an article quoted from the *Lancet*, May 18, 1889, the *Ther. Gaz.* of July, gives Dr. Unna's treatment of herpes zoster as follows: Firstly, when the vesicles have already formed, in order to prevent suppuration, apply a gelatinous paste of zinc; or, corrosive sublimate, iodoform, carbolic acid or resorcine in lotions containing spirit.

Secondly, before the vesicles have formed paint over the affected parts, icthyol mixed with water, or else use a strong paste of zinc and resorcine.

Treatment of Barber's Itch

Dr. Rosenthal orders the seat of the affection to be closely shaved daily and the following ointment to be rubbed in twice a day:

℞ Acid tannic, - - - - grs. xlv.
Lact. sulph., - - - - ℥jss.
Zinc oxid.,
Amyl, - - - - - aa. ℥iv.
Vasel., - - - - - ℥j.

M. Sig. To be used twice daily.

In a month nothing remains of the eruption but a very slowly disappearing erythema.

Therapeutic Applications of Arsenite of Copper.

In the July number of the *Ther. Gazette*, Dr. John

Aulde, published an interesting article giving his experience with arsenite of copper. The doctor has used arsenite of copper with phenomenal success in many cases of bowel complaints, varying from simple colicky pains to severe forms of diarrhœa of several days duration. Even cases bearing a striking resemblance to commencing typhoid were speedily cured. The method of administering consisted in dissolving in four ounces of water a tablet containing $^1/_{100}$ of a grain of arsenite of copper and one grain of sugar of milk. Of this solution a teaspoonful was given every ten minutes for one hour. After that the intervals were lengthened to about one hour. The amount given should never exceed $^1/_{100}$ grain in 24 hours.

Treatment of Chronic Cystitis.

Dr. V. Mosetig-Moorhof, is reported in the *Wiener Med. Press.* to have great success in the treatment of chronic cystitis by the injection of the following emul sion preceded by irrigation of the bladder by moderately hot water:

℞	Iodoform, - - - -	50 parts.
	Glycerine, - - -	40 "
	Distilled water, - - -	10 "
	Tragacanth gum, - -	$^1/_4$ "

M. Sig. One tablespoonful to a pint of lukewarm water, well stirred, for one injection. Injections made every third day.

Sparteine.

In view of the diametrically opposite opinions espoused by different experimentors regarding the therapeutic action of sparteine; the following scientifically conducted comparative study of cardiac tonics by Prof. Lewaschew in the (*Zeitsthrift f. Klin. Med.*) cannot fail to be of interest. Any cardiac tonic has a more marked action on the heart when first given than after its administration has been continued for some time. If, however, another member of the class be substituted, the substitute may be able to exert its full power. Furthermore, these remedies, though similar in their action on the heart, affect variously the other organs of the body. Any addition to the list of heart tonics must therefore always be welcome.

Professor Lewaschew gave sparteine to 22 cardiac cases. In 7 only was there any therapeutic action. Of the 15 other, 3 remained also unrelieved by digitalis or adonis, while 12 responded to medium and large doses of digitalis and adonis by stronger and more regular cardiac action. The seven cases relieved by sparteine were in the early stages of heart failure. The 12 cases unaffected by sparteine but relieved by adonis and digitalis were in the later stages of heart failure. In no case did sparteine succeed where digitalis and adonis had failed. In only one case did sparteine succeed in balancing the circulation for any considerable period of time.

Sparteine had a diuretic affect in some of the cases in which it toned the heart, but not in any of the cases in which it failed to influence the heart.

Neither in health, nor in dropsy independent of cardiac weakness, does sparteine act on the kidneys. Its therapeutic action, when it occurs at all, take place about 15 minutes after its administration. The dose varies from $1\frac{1}{2}$ to $4\frac{1}{2}$ grains a day, given in 3 or 4 doses. These amounts may sometimes cause diarrhœa, but very rarely nausea and vomiting.

Action of Pyrodin as an Antipyretic.

The *Uuiversity Med. Magazine* reviews the results obtained by different observers on the therapeutic action of pyrodin, and concludes that it is a powerfhl antipyretic, acting quickly and persistently. But it frequently causes poisonous symptoms characterized by prostration and apathy. These symptoms occurring even in some cases where no antipyretic action was manifested, is evidence that they were not due to excessive doses. Pyrodin therefore appeares to be too dangerous a drug to be of any therapeutic value.

Antipyrin in Hæmorrhoidal Ulcers.

Dr. J. Schreiber, (*New York Med. Jour.*) cured a hæmorrhoidal ulcer in 20 days by dusting it with antipyrin. The ulcer had been of 10 years' standing. Each application caused moderate pain which lasted 15 min utes.

TRANSLATIONS.

HÆMORRHAGIC PLEURISY (LEFT) OF INFLAMMATORY ORIGIN, WITH SYMPTOMS OF ASPHYXIA.—THORACENTESIS—RECOVERY. COINCIDENT PARALYSIS OF THE CORRESPONDING LOWER EXTREMITY.

BY DR. E OZENNE.

Translated by Dr. Wm. N. Beggs, St. Louis.

For the last twenty years it has been possible to demonstrate, by facts, occurring in increasing numbers from day to day, that it is not always necessary to give to hæmorrhagic pleurisy as unfavorable a diagnosis as has heretofore been given. Aside from cases where the sanguineous exudation is symptomatic of a cancerous or tuberculous pleuro pulmonic affection, or a general infectious disease, and consequently of grave import, there are others where it depends upon the intensity of the pleuritic inflammatory process, and are curable by puncture. Among recent works which have been published on this subject I can recall the communication which M. Troisier made, last year, at one of the meet-

ings of the Societe de Medicine (Oct. 12), and the resume of some observations (reported by M. Lereboulet) in the fourth number of the *Gazette hebdomadaire*, of this year. The following case, which I have recently observed with Dr. Perrier (of Asnieres) who has kindly placed his notes of the case at my disposal, is a new example.

The patient was a young woman, æt. 30 years, of strong constitution and sanguine temperament in whom no antecedent disease of note was known to have existed. On February 25, said the patient, probably in consequence of a cold she was taken with a sense of malaise, lassitude, and shivering. On the 27th the ordinary symptoms of a left pleuritis of moderate intensity were present. This continued until March 12, without any unusual symptoms being exhibited. Beginning with this day, chills and profuse sweats, accompanied by a notable elevation of temperature, appeared. The next day the exudation which had in the preceding days almost disappeared, was noticed to be increased. There was severe pain in the affected side,limitation of respiration and temperature of 39° Centigrade.

After a night of insomnia and continuous dyspnœa complete paralysis of the left inferior extremity followed accompanied with abolition of sensibility, so marked that bottles of boiling water having been placed along the leg and thigh by an obliging neighbor, although the patient complained of not feeling them, they produced several burns of the second and first degrees. The fol lowing day M. Perrier, seeing that the dyspnœa had increased and signs of asphyxia appeared, decided it necessary to puncture and called upon me to perform the operation. At 9 o'clock P.M., February 15, the patient was in this condition.

She is seated in bed, her body sustained by several pillows, bent forward to aid respiration, which is short, rapid and very much restrained. The face is congested, lips semi-cyanotic, and speech interrupted. The patient complains not only of difficulty of respiration but also of a violent pain in the left breast. Pulse is small and regular. At the postero-inferior portion of the thorax there is manifest swelling, and circumscribed œdema, tender to the touch. Subclavicular space resonant; below this dullness and absolute flatness with absence of elasticity in the lower half, most marked posteriorly. No thoracic vibrations in the portion occupied by the exudate. There is abolition of the respiratory bruit; intense blowing sound and egophony are present. Exaggerated respiration on right side. Heart is displaced, its impulse being perceived at the right border of the sternum.

As there was no doubt of the diagnosis of pleuritis, on account of the abundance of exudation, the beginning cyanosis, the dyspnœa and the displacement of the heart there must be no hesitation in performing the operation of thoracentesis. It was done immediately. After having cleansed the thoracic region with soap, and washed it off with brandy (the only liquid, however little antiseptic, at our disposal), the patient having been placed in a horizontal position, and having heated the smallest trocar of Potain's apparatus, we made the puncture in the 7th intercostal space in the axillary line, to the depth of 3 cm., according to the ordinary rules. Immediately a frothy, reddish, highly colored fluid ran out. Of this we aspirated from the cavity about two and one-half litres, pausing from time to time in order not to withdraw it at a single draught.

During the evacuation of the liquid, of which we left a small amount in the plural cavity, there was produced neither cough, nor thoracic pain, nor albuminous expectoration, and while the liquid was escaping the patient began to feel relief, which was subsequently increased by the disappearance of the restrained breathing. After the close of the operation it was easy to determine the return of resonance in a portion of the region formerly dull.

Following the operation there were no complications. The liquid was partially reproduced subsequently, but resorption took place gradually and the general condition improved.

March 15, M. Perrier wrote to me that the patient could be considered healed of the pluritis, the same, unfortunately, could not be said of the burns, whose progress toward cicatrization was very slow. Although the sensory paralysis was materially improved, there was little progress in motor improvement.

Reflections.—To me it seems useless to review the symptoms presented by the patient for the sake of discussing the diagnosis. At most there could have been some doubt as to a diagnosis of simple pleuritis or a purulent pleuritis. If we were not decidedly of the latter opinion, if we did not make the exploratory puncture, it was because the real signs of suppuration were not present. Nothing could have made us foresee the hemorrhagic exudation which has no pathognomic signs.

Can we, indeed, be more positive as regards the pathology of this hæmato-thorax? We can in the beginning, deny the existence of cancer, tuberculosis or any general affection, because the patient was in very good health before the onset of the pluritis and she has actually recovered from the latter. Let us mention, only to reject it, a too violent inspiration during the thoracentesis, for the first drops were as sanguinolent as the last. To explain the bloody exudate there remains, then, only the intensity of the inflammatory process, whether by the rupture of small pleural vessels under the influence of a congestive pressure, or by the rupture of vessels developed in the newly formed membranes.

Whatever be the pathology, the thoracentesis, which was formerly indicated in this case, has once more demonstrated that this variety of pleuritis is curable, even by a single puncture. The patient convalesced rapidly, although at one time, through a false movement of Potain's apparatus a little air was introduced into the pleura; and although the liquid was subsequently in part reproduced. Besides no complication has resulted, therefore we can register a definite result in favor of the favorable prognosis which hemorrhagic pleuritis allows

whenever it is connected with only a more or less inflammatory state of the pleura. As for the paralysis affecting the lower limb corresponding to the exudate it is not necessary to recall the fact that this complication has long since been noted in suppurative plueritis. It is generally admitted (*Des paralysies daus le maladies aigues. These dagreg-de Landonzy, 1880*), that it should be placed in the group of reflex paralysis. It seems more exceptional in hæmato-thorax, and in our patient it presents this peculiarity, that not only was motion abolished, but also sensation, which does not seem to be the rule in cases already published.

Calcium Chloride in Glandular Affection of the Neck.—Calcium chloride is an agent which was held in the highest esteem by the earlier practitioners of medicine, but is hardly recognized by therapeutic authors of the present day. Dr. S. Coghill, of the Royal National Hospital for Consumptives at Ventnor, in a communication to the *Practitioner*, states that he has "again and again seen chronically indurated and enlarged glands which absolutely amounted to deformity, and which had resisted all previous treatment, yield even in adults, to the administration of this salt. In children and younger persons, when the sleep becomes restless, the breath fetid, the tongue foul and coated, the tonsils enlarged, I know of no remedy approaching it in value. The colliquative diarrhœa, which so often accompanied this condition, and above all, that obstinate dysentery which is seen with hypertrophy of the mesenteric glands, yield to the solution of the chloride of calcium like a charm."

Dr. J. Mays writes, in the *Archives of Pediatrics*: "I have used this agent for a number of years, both in private and public practice, and can fully indorse the strong views expressed by Dr. Coghill, especially so far as scrofulous affections of the neck are concerned * * * Here the chloride of calcium acts admirably. It reduces the enlargement, promotes nutrition, and is generally more efficacious than anything I have ever prescribed. Its resolvent power is equally marked in the glandular swellings of adults, although here it requires a longer time, and its action is facilitated by the simultaneous application of iodine."

This agent must not be mistaken for the chloride of lime—the ordinary disinfecting powder—the composition of which is entirely different. By prescribing the granular calcium chloride this possible error will be avoided. The dose is from two to four grains for children, and from ten to twenty grains for adults. It can be given in milk or water, but the best vehicle for it is syrup of sarsaparilla.—*N. Y. Med. Times.*

Medical Periodicals.—It has been ascertained that the principal medical periodicals of the world number 266; 174 are published in the United States and 92 in all other countries.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,
EDITOR.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, SEPTEMBER 14, 1889.

Elimination of a Purulent Pleuritic Collection Through the Bladder.

We have all heard of many sigular routes through which pus obtained its evacuation in various instances, but one of the most remarkable of this kind is that related by Dr. Froidure (*Concours Med.*). The patient had vomited on the fifteenth day of a purulent pleurisy, about 1,500 cc. (3 pints) of fluid; after a transient amelioration, the vomiting began again, and at the same time the patient experienced severe pains in the side, and along the vertebral column, toward the hip and abdomen. While the pains existed a diminution of the pleuritic fluid and likewise of the dyspnœa was noticed. One night the patient, feeling an urgent desire to urinate, hardly reached the vessel when he experienced a sensation as though something was giving way, and passed two vessels of pus. Some hours afterward, the abdominal pains disappeared, the patient was able to sit up and recovery followed without further complications.

Pathogemy of Hemoglobinuria.

Lepine, in a communication to the Societe des Sciences Med. de Lyon, described two kinds of hemoglobinuria; one, hemoglobinuria from hemoglobinemia (in which the pathological change occurs in the blood), and another in which the hemoglobinuria is of renal origin, depending on congestion of the kidney. It suffices that there be a moderate rupture of vessels of the glomeruli for the blood globules transuding into the capsule of Bowman to become dissolved in the serous liquid found in that portion of the tubule. In proof of this M. Lepine, related an experiment carried out by

him. He introduced tubes into the two ureters of a dog. Both were then subjected to the same degree of pressure, but on one side, with sterilized water, on the other with ammoniacal urine. The pressure was maintained for three hours. At the moment of its cessation Lepine observed that the urine flowing from the side on which sterilized water was used was normal, while that coming from the other side was of a dark red color, rendered so, not by hematuria, but by true hemoglobinuria. It was not the ammoniacal urine that destroyed the blood-globules, because, for a time, they undergo no change in ammoniacal urine.

This experiment, proving the possibility of hemoglobinuria, in consequence of a local lesion, is in conflict with the largely accepted theory of M. Robin, that hemoglobinuria is always an evidence of changes which occur, previous to the elimination of the urine by the kidneys; in other words, that there is always a solution of the globules in the blood.

The Color of the Tongue as an Indication of the Ailments, Medicaments or Caustics that may have been Swallow.

M. Legendre, in *Le Concours Med.* gives the following as indications presented by the tongue.

Black—Ink, red wine, mulberries, certain kinds of cherries, or berries.

Brown—Tobacco, green walnuts, prunes.

Red-Brown—Chocolate.

Saffron-yellow—Laudanum, rhubarb.

Red—Red-bark, rhatany, framboise, cherries.

When the colorations are from caustics, they possess a double interest—with respect to a decision as to the proper antidote to be given, and also with respect to the medico-legal interest.

Gray-black—Sulphuric acid, oxalic acid, carbolic acid.

Yellow—Nitric acid (if the action is superficial), chromic acid.

Red—Acid nitrate of mercury.

Gelatiniform-gray—Caustic potash.

White or pearl-gray—Nitrate of siver, corrosive sublimate.

Grave Facts.

Some strange things are revealed from the grave. The tomb of Edward I., who died in 1307, was opened January 2, 1770, after 463 years had elapsed. His body was as perfect as it was on the day of his burial. Canute, the Dane, who became ruler of England in 1017, and died 19 years later, was found by the workmen who repaired Winchester Cathedral in 1776. Although he had been dead nearly 750 years his body appeared as fresh and plump as that of a person newly buried. During the reign of James II., of England, the remains of Thomas Gray, Marquis of Dorset, were exhumed. He was buried October 2, 1530, and disinterred in the summer of 1608, 78 years after burial, yet the eyes, hair, nails and joints seemed perfectly fresh and life-like.

Robt. Braybrook, who was consecrated bishop of London in 1381, and who died in 1404, and was buried in St. Paul's Cathedral, was taken from the tomb after the great fire in 1666. He had lain in the tomb 262 years. However, his remains were found unshrunken and surprisingly fresh. The hair had grown to over a yard in length and retained its lustre as in life. The eye-lids seemed plump and full and upon being pulled apart revealed the color of the eyes!

The workmen believed it a case of supernatural preservation and fled in terror from the scene.

Pietro Rodriguez, the Portuguese jeweler who was accused before the tribunal of the inquisition and buried alive in a vault, was found 206 years later by freebooters, who destroyed the old church in which he was buried in hope of finding hidden treasure. His hair and beard were firm, his skin natural in hue and texture, without the least trace of decomposition. His little daughter who was buried with him, was as perfectly preserved as her father.

The Treatment of Erysipelas.

The interesting experience of Dr. Kohn in the treatment of a number of cases of erysipelas, is given in the *Jour. de Med. et de Chir. Pratiques.* The doctor experimented successively with the remedies usually recommended for such cases, quinine, salicylate of soda, antipyrine, etc., but without any appreciable result; notwithstanding liberal doses of these agents, the fever persisted, ranging between 39.5° and 41.6° C. Subcutaneous injections of 2% carbolic acid solution practiced in the neighborhood of the erysipelatous area did not succeed in preventing the spread of the inflammation. Painting with ichthyol and ether or collodion, gave no more satisfactory results. It was the same with applications of turpentine or of carbolized vaseline, as prescribed by Eichorst. Finally, the author had recourse to the method of Rosenbach, which consists in washing with soap, not only the erysipelatous plaque, but including all of the neighboring cutaneous surface, then soaking continuously the same regions with a 5% solution of carbolic acid, dissolved in absolute alcohol. The results from this method were brilliant beyond expectation in all cases in which he tried it. With one young patient, of whom the inflammation had successively invaded the face, the scalp, the thorax and back, the process paled rapidly under the influence of the treatment; the fever diminished at the same time and within five days the patient was considered cured.

In two other cases of the same age (15 years) the facial erysipelas treated by this means from the beginning, did not surpass their first bounds.

Hygiene During First Dentition.

Dr. Monti, writing in the *Revue de Medecine de l'Enfance*, calls attention to certain precautions, an observance of which serve to maintain the first teeth in good condition.

According to the author, all meddlesome intervention during the process of first dentition should in general be avoided. Imbued with this belief, he considers as harmful the numerous methods usually employed, such, for example, as the chewing of hard objects, the painting of the gums with so called emollients, etc.

The sole precaution which it is necessary to take is to keep the buccal mucous membrane in a perfectly clean and healthy state. It is important, then, during dentition to wash the mouth many times a day, either with pure water, or with antiseptic solutions. Amongst the latter the most efficacious are the following:

℞	Ac. borici, - -	3 parts
	Aq. dest., - -	200 parts
	Tr. myrrh, - -	2 parts

or

℞	Sod. salicylat., - - -	3 parts
	Aq. dest., - - -	200 parts
	Tr. myrrh, - - - -	3 parts

When the milk teeth have appeared, it is well to clean them each day with a very soft brush, and to use at the same time, either of the solutions indicated, or an appropriate dental powder, such as the following, which is advocated by Zsigmomdy:

℞	Magnes. carbonat.,	
	Sapon hyspan., - -	aa 10 gm.
	Os de seiche pulv.,* - -	10 gm.
	Spts. menthæ pip., - -	gtt. jv.

With very young infants this may be used:

℞	Magnes. carbonat., - -	5 gm.
	Cretal praeparatæ, - -	15 gm.
	Spts. menthal, - - -	gtt jv.

When any of the milk teeth begin to show signs of caries it is necessary to at once take steps to prevent the further progress of the affection by teaching the child to use the ones affected as little as possible, since it is best to preserve them to serve as a protection for the ones which follow.

*Powdered cuttlefish bone.

MEDICAL ITEMS.

Saccharine to Prevent Ammoniacal Changes in the Urine.—Dr. F. Little says that this drug is quite capable of combating alkalinity and ammoniacal decomposition of the urine.

Instability of Chloroform.—Dr. Paul Raynier, in referring to the importance of using absolutely pure chloroform in anesthesia, said that, exposed to light, in the presence of air, chloroform decomposes in hours or days, according to whether the light is diffuse or direct. That to the changes thus brought about should be accredited many of the unfortunate accidents that occur from its use.

The Telephonic Probe.—Dr. Geo. R. Fowler reports in *N. Y. Med. Jour.* a case of shot wound of the head, in which the bullet was located by means of the telephonic probe. A Pean forceps was then passed in the track of the probe and made to grasp and extract the bullet.

Anatomical Eccentricities.—M. Meunier reports the case of a young woman who was the possessor of eight distinct mammæ, two axillary, four pectoral, two abdominal. We remember of seeing a man at the City Hospital who had four distinct nipples, two in their position and another pair located just over the border of the ribs.

Hæmostatic Effect of Antipyrine.—Dr. Huchard shows how this effect of antipyrine may become a serious objection. He gave it to a woman who was suffering from dysmenorrhœa; the flow was immediately suspended; there was shivering, cyanosis and tendency to syncope. He has noticed the same effect, but less marked, in two other cases in which he prescribed the drug under similar circumstances.

Essentials for the Diagnosis of Somnambulism.—Charcot thus characterizes somnambulism:

1. It is an affection of infancy and of early youth.
2. It is rare amongst men.
3. It is manifested almost always at the same hour, at midnight or one of the early morning hours.
4. Wide-open eyes is a diagnostic mark of the first importance.
5. In his wanderings, the somnambulist pays no more attention to you than if you did not exist, even when you attempt to bar his passage.
9. Somnambulism is a rare disease, especially where there is no hysterical element in the case.

Diseases with Personal Names.—

Alibert's disease.—Fungoid mycosis.
Basedow's disease.—Exophthalmic goitre.
Bozin's disease.—Buccal psoriasis.
Boyer's cyst.—Sub-hyodean cyst.
Cheyne-Stoke's respiration.—Uremic resp.
Fauchord's disease.—Alveo-dental periostitis.
Grave's disease.—Exophthalmic goitre.
Hodgkin's disease.—Adenia, lymphadenoma.
Kopp's asthma.—Thymic asthma, spasm of the glottis.
Ludwig's angina.—Infectious sub-hyoidean phlegmon.
Millar's asthma.—Stridulous laryngitis.
Parry's disease.—Exophthalmic goitre.
Stork's blenorrhœa.—Blenorrhœa of the superior respiratory passages.
Thornwald's disease.—Inflammation of the pharyngeal gland of Luska.—*Can. Lancet.*

INJECTION FOR LEUCORRHŒA.—

℞ Zinc. sulphat, - - - ʒijss
Ergotine, - - - - - ʒj
Alcohol, - - - - - - ʒjss
Aq. camphoræ, - - - ℥viij

M. S. A tablespoonful in enough hot water to make an injection.

This is of service in vaginal leucorrhœa of young married women.

FACTORS WHICH CONTRIBUTE TO THE PRODUCTION OF TERTIARY SYPHILIS.—According to Neumann, of Vienna, the following conduce to tertiary syphilitic manifestations:

Treatment not sufficiently prolonged or lacking in energy.

Previous constitutional defects (tuberculosis, diabetes, malaria).

Everything which interferes with nutrition.

Tertiary syphilides show themselves in individuals who have been treated, but they are especially liable to appear in those who have not.

Tertiary syphilis is independent of the form or intensity of either the chancre or the secondary eruption.

ORIGIN OF A SMALL-POX EPIDEMIC.—A recent small-pox epidemic at Menominee, Wis., which caused much excitement for a time, had rather a curious origin. About a month ago the Allen Pest House (Quarantine Hospital) at Fort Wayne, Ind., was robbed, and all the clothing which had been taken from 270 patients treated there, was stolen and sold to men working for the Natural Gas Co. They were mostly Italians and Swedes, and a large number of them left shortly after, carrying the Pest House clothes with them. Among the number was a family named Anderson. They went to Menominee, contracting the disease on the way there, and the epidemic made itself manifest soon after their arrival in that town.

FROM THE GERMAN.

By Dr. W. C. Mardorf, St. Louis.

ANGINA PECTORIS FOLLOWING COMPRESSION OF THE SYMPATHETIC.

Dr. H. Molliere, in *Lyon Med.*, says up to the present there have been but few post mortems in cases of angina pectoris, and in these the cause has been found to be an irritation of one of the three nerves which influence respiration, the pneumogastric, the phrenic or the sympathetic. Generally the site of irritation is to be found in the thorax, but the following case constitutes an exception to this rule.

A man, æt. 59, who had a cough every winter for ten years, suffered for two months with intense abdominal pains and diarrhœa, and at the same time rapidly emaciated. His cough grew more harrassing and frequent, long-continued attacks of angina pectoris began to appear. Physical examination of the chest and abdomen afforded no explanation. In the few days preceding death emaciation increased, and the attacks of angina, which were wholly uninfluenced by narcotics, became still more frequent and were accompanied by acute pain in the epigastrium.

The post-mortem showed carcinoma of the mesenteric and prevertebral ganglia. The sympathetics of both sides ended in a mass of carcinomatous lymphatic glands between the stomach and spleen, involving the cœliac plexus. There was emphysema of the lungs, with secondary carcinomatous nodules. The bronchial and pulmonary ganglia were not involved. Certain branches of the pnemogastric and phrenic nerves pass to the solar plexus, and the carcinomatous degeneration of the latter was undoubtedly, by reflex action, the cause of the attacks of angina pectoris. It is perhaps possible that irritation of the sympathetic nerve-endings in the intestinal mucous membrane may sometimes be the source of similar attacks in a reflex way. (In a case of Dieulafoy's, Peyer's patches were the affected portions.)—*Deutsche. Med. Zeit.*

IODOFORM IN VESICAL CATARRH.

Dr. Frey, in *Wein. Med. Pr.*, states that the use of iodoform emulsion in his cases of chronic vesical catarrh was attended by better resnlts than with other remedies. He used the following formula:

℞ Iodoformi, - - - - - - ʒxij
Glycerinæ, - - - - - - ʒx
Tragacanthæ, - - - - - gr. iv
Aq. dest., - - - - - - ʒiij

M.

Of this one-half ounce is thoroughly mixed with a pint of warm water and injected every third day, the bladder having previously been washed out with plain warm water.—*Deutsch. Med. Zeit.*

ENURESIS NOCTURNA IN BOYS.

Dr. Oberlander, in *Berl. Klin. Wochench.*, says he believes that nocturnal incontinence of urine in children is always attributable to an irritation reflected from some part of the genito-urinary tract, whenever deeper errors of development cannot be found. He does not consider as well founded the view which accepts a simple neurosis as the cause of this trouble (Ultzmann.) He thinks the justice of his statement is proven by the extraordinary results following his methods of treatment in nocturnal incontinence, which consists in the performance of circumcision, the rupture of prepucial adhesions or the division of a congenitally contracted meatus, or the performance of any such operations whenever indicated. Congenital contractions, may be found not only at the meatus, but also at the internal orifice and anywhere along the course of the urethra. These abnormalities

may disappear of themselves before the age of puberty. The more serious of these defects may have an influence which passes beyond puberty and is exerted upon the adult individual; this may be proven by obtaining careful and systematic histories of patients with irritable bladder, frequent nocturnal pollutions, etc., or of those whose sufferings are greater than ordinary during the course of any acute or chronic disease of these parts.

The author was first led to these thoughts concerning the etiology of urinary incontinence by the astonishing results he obtained during the past five or six years in ating chronic disorders of the vesical muscular apparatus in adults by forcible dilatation of the posterior urethra.

Strychnia in Alcoholism.

The good results reported from various quarters as attending the use of strychnia in alcoholism caused Dr. Jaroshewsky to undertake a series of experimental researches to determine the antagonism of strychnia and alcohol, if there be any. His experiments, carried out on dogs, led him to the following conclusions:

1. That strychnia undoubtedly neutralizes the toxic and narcotic effects of alcohol.
2. If the two be taken together, much larger quantities of alcohol may be ingested, and this, too, without causing the usual organic changes which follow when alcohol is taken alone.
3. There are certain, bounds, however, beyond which strychnia itself is injurious to the organism.
4. The use of strychnia should be a therapeutic measure in every form of alcoholism.
5. Strychnia may be looked on as a powerful prophylactic against alcoholism.—*Mediz. Obozr., Deutsch. Med. Zeit.*

Recurrence of Mammary Carcinoma.

Dr. Haidenhain has made microscopical examinations of a number of mammæ removed for carcinoma in order to determine in what manner recurrence took place, as this latter fact is of such frequent occurrence, even where the removal of diseased tissues has been thought to be amply free. He found that the extent of infiltration is much greater than is ordinarily supposed to be the case, and to improve the chance of a permanent recovery he recommends the removal of the entire gland, together with the uppermost layers of the pectoralis major muscle, even where the tumor is freely movable; if the muscle be at all involved it should be removed in toto, if possible in such a manner that not even a single fibre is allowed to remain.—*Munch Med. Wochensch. Med. Chir. Rundsch.*

Annual Announcement of the New York Polyclinic and Hospital has been received.

SOCIETY NEWS.

A NEW TRI-STATE MEDICAL ASSOCIATION.

Chattanooga, Tenn., August 8, 1889.

The following call has been issued:

"The members of the medical profession in Alabama, Georgia and Tennessee are requested to meet in Chattanooga, on the third Tuesday in October, for the purpose of forming a Tri-State Medical Association. All will be admitted to the meeting of the association, but the membership will be restricted to graduates of regular medical colleges in good standing."

This call is signed by committees from Jackson county, Alabama, Medical Society; Chattanooga, Tennessee, Medical Society; Cleveland, Tennessee, Medical Society; Cartersville, Georgia, Medical Society; Dalton, Georgia, Medical Society.

It is hoped that there will be a general turnout of the profession. Papers of interest have been promised by prominent men.

This organization will be independent of all other societies. It will be an association of individual members of the profession of medicine, and will be managed in the interest of medical progress. You are earnestly requested to be present and participate in the exercises.

The session will continue two days. If you desire to read a paper or exhibit a specimen, please notify the undersigned at an early date.

Another circular will be issed in due time announcing the titles and authors of papers.

Fraternally yours.

Frank Trester Smith, M.D.,
Secretary of Committee.

SELECTIONS.

CHRONIC POISONING BY ARSENIC.

In a recent communication to the Academie de Medecine, of Paris, Prof. Brouardel gave the results of a very careful inquiry into the symptoms of chronic poisoning by arsenic, basing his investigations mainly on an outbreak of arsenical poisoning which recently occurred at Hyeres, owing to the accidental poisoning of some wine with arsenic. Prof. Brouardel lays great stress on the fact that the symptoms of chronic poisoning are precisely the same as those of the acute form, only more spread out, as it were; and the symptoms are remarkably uniform, no matter what the cause or mode of entry of the poison into the body may be. Every medical man is alive to the fact that wall-paper is a common source of chronic arsenical poisoning, though probably all are not equally cognizant of the fact that the color of the paper is no criterion as to whether it contains arsenic, for the notorious green color is due to the presence of copper, not of arsenic; other sources of arsenical poisoning are

quite common, witness the cases at Loughton, in Essex, a few years ago, where violet powder containing arsenic gave rise to rapidly fatal symptoms; various colored sweetmeats, the papers used for wrapping them in, cretonnes, and various articles of millinery have in numerous instances been the cause of symptoms of poisoning. In the latter instances it is generally the people engaged in making up the dresses and so forth, who suffer; how the wearers fare we often do not learn; their ailments presumably go completely unrecognized.

The symptoms will at the onset depend somewhat on the cause; in criminal cases they will be less gradual than in those of accidental origin, and they will be found to bear a definite relation, if a sufficiently close inquiry be made, either to the taking of certain articles of food or medicine, or to the times of attendance of a particular person. A simple malaise, with slight indications of gastric disturbance, perhaps trivial, perhaps accompanied with symptoms suggestive of typhoid fever, will usually be the first indication. The vomiting is more or less spontaneous; at any rate it is independant of, and unaccompanied by, pain in the stomach; it is generally copious, and, when unaccompanied by diarrhœa, and especially if the stools should be tinged with blood, we have a condition which in the adult should at once suggest the posibility of arsenical poisoning. The coexistence of vomiting and diarrhœa, with or without febrile symptoms, is, in an adult, indicative of poisoning, rather than of disease; in a child such a combination of symptoms would not have this import. Constipation is, however, in the early stages, more common than diarrhæa. In the second period catarrh of the respiratory tract generally makes its appearance; there is a certain amount of mucous expectoration, and the patient has symptoms of laryngitis. Coryza, more or less lachrymation, and injection of the conjunctiva will probably also be present, with swelling of the eyelids. Patches of erythema, a vesicular eruption, urticaria and a branny desquamation are amongst the manifestations that may be expected at this stage, as also the tendency to pigmentation, to which attention has frequently been drawn in this country in the case of choreic children treated by arsenic. A persistent headache, numbness in the legs and feet, and sometimes cramps in the legs, will also be generally found; the special sense are unaffected. Up to this period it is more than probable that the case will have been misinterpreted, but when, in addition to the above phenomena, paralytic symptoms are developed, the true nature of the case should at once suggest itself to the careful observer.

At this stage the patient is easily tired, has a difficulty in going up-stairs, and gradually loses all power in his legs, so as to be unable to stand without assistance. The group of muscles on the front and outer side of the leg are the ones principally affected, and after a time they waste, their faradic excitability in advanced stages is lost, and the response to galvanism is diminished. The muscles of the arms are also affected, but to a less extent; the muscles of the face and the sphincters always escape. The tendon reflexes are absent, and the plantar reflexes diminished. Even when the condition is recognized, it does not always follow that recovery will take place, death sometimes occurring suddenly from heart-failure when the patient appeared to be doing well. Cases in which paralysis has supervened are always tedious. The paralytic symptoms have been shown to be due to peripheral neuritis.

In a doubtful case, examination of the vomited matters or the motions might, of course, reveal the presence of poison, but in a criminal case it might not be possible to obtain these, or we might not wish our suspicions to be known. The examination of the urine is quite as efficacious as the examination of the vomit, as arsenic is sure to be present in it if the case is one of arsenical poisoning. Arsenic has been found in the urine a few minutes after its ingestion, and Prof. Brouardel states that in one case he found arsenic in the urine forty days after its administration had been stopped. He also recommends that the hair should be cut and examined; in one case in 100 grammes of hair he found 1 milligramme of arsenic. As regards the discovery of arsenic in the tissues after death, authorities have been by no means agreed. Scolosoboff and others have asserted that arsenic accumulates to the greatest extent in the brain and spinal cord. Ludwig found that it was most persistent in the liver; the bones, according to him, might retain the poison for some time, but not so long as the liver. Prof. Brouardel, however, finds that when the poison has been taken into the body slowly in small repeated doses it is apt to be deposited in the spongy tissue of the flat bones—for example, of the cranium, vertebræ, and scapula—and that it is eliminated from these very slowly indeed; in the more rapid cases it is found in the bones rich in compact tissue—that is, the femur—and this fact no doubt explains the apparent discrepancy between his results and those of Ludwig.—*British Medical Journal.*

THE USE OF ANTISEPTICS BY COUNTRY SURGEONS.

The surgeon of the city, with all his expensive appliances and machinery and skilled assistance, may find the aseptic method of treating wounds practicable; but the country practioner who must forego those aids, and who finds his patient oftentimes in anything but aseptic surroundings, must resort to other and simpler methods.

All my surgical instruments and dressings are carried in one small hand bag. I have carbolic acid, tablets of corrosive sublimate and iodoform. Needles, knife-blades and other small instruments are kept in a 1-60 carbolic-glycerine solution. After using and cleansing, they are put back into this solution, and thus are always ready for immediate use. Other large instruments are put into a 1-40 carbolic solutions some time before needing them. My bag contains silk on a reel, and drainage-tubing, both in a 1-4000 solution of corrosive sublimate. Sterilized sponges are carried in a 1-1000 corrosive-sublimate

solution, and suitable pieces of oiled silk are put in the same, some time before using

After the flesh adjacent to the wound has been thoroughly washed, both skin and raw surface are bathed in a corrosive-sublimate solution, the strength varying between 1-1000 and 1-5000, in inverse proportion to the extent of the raw surface. After the incisions are completed, the cut surfaces are washed for a considerable length of time in a 1-4000 corrosive-sublimate solution, hot enough to check bleeding, to blanch tissue, and to render the parts thoroughly aseptic.

For ligature I use silk, and cut the ends short. If the wound is a large one and necessitates the use of a drainage tube, I do not think that it makes much difference whether or no the ligatures are cut short. But if the wound be small, if there be no drainage-tube, or if it be early removed, I consider that the long ends of the ligatures prevent absolute healing in a short space of time. These short silk ligatures either become absorbed or encapsuled. They give me no trouble, and I get healing by first intention through the full extent of the wound, which is not closed until every particle of oozing blood has ceased. For healing, I depend largely on the most careful and accurate approximation of the parts.

After the wound is closed, and thoroughly washed with a 1-4000 corrosive solution, iodoform is used freely, as wounds seem to heal more kindly with it than without it. After this a piece of sterilized oiled silk large enough to cover the wound is applied. This is used for two purposes: to prevent the sticking of the dressings, and to keep the plasters which cannot be rendered aseptic from contact with the wound. Over this is placed several layers of sublimate or carbolic gauze, then a large piece of oiled silk to cover the whole, which is bandadged in the ordinary way. Subsequent dressings, I do, if possible, myself, and make them as few and far between as may be. On redressing, the wound is generally found to be so clean that the usual washing is simply a process of dampening with an antiseptic solution.

Since I began the constant and systematic use of antiseptics, I have seen most cases heal without a drop of pus. In simple amputation I have come to expect healing by first intention, except around the drainage-tube and solid healing by from 21 to 28 days after operation. As a rule I greatly prefer the action of corrosive sublimate to that of carbolic acid as an antiseptic. But if I know of the existence of albuminuria, or suspect any latent tendency to disease or congestion of the kidneys I am very careful to avoid it.

It will be seen that my method is exceedingly simple, so simple that it would hardly be a matter of interest except for the fact that its very simplicity makes it practicable, and this especially adapts it to the unassisted country surgeon. It is now something over two years since I have seen a touch of surgical fever in my own practice, and in uncomplicated surgical cases, I have rarely seen a temperature above 100°. I now get healing of large cut surfaces by first intention,as a rule; formerly it was the exception.—Dr. Robt. Burns, in *Bost. Med. & Surg. Jour.*

TO PREVENT THE SPREAD OF SCARLET FEVER AND DIPHTHERIA.

Directions Issued by the Board of Health, New Haven.

As soon as any person is taken sick with scarlet fever, or diphtheria, select a room as remote as posible from the rest of the family.

Remove from the room all unnecessary furniture, rugs, and hangings, then have the patient placed in this room and not allowed to leave it while sick.

Allow only necessary attendants to enter this room.

Keep all other people out of the room and away from those who attend the patient.

Persons who live in the house, or have lived in the house during any part of the disease, must not go to school, church, or to any public gathering, nor to any house where there are children.

Immediately disinfect every article which is taken from the sick room.

To disinfect dishes, boil them in common water for half an hour.

To disinfect bed-clothes, the patient's clothing,towels, napkins, handkerchiefs and other similar articles: Before removing them from the sick room, place them in a tub, and soak them for half an hour in a weak solution of carbolic acid, made by mixing 2½ ounces of pure carbolic acid with 1 gallon (4 quarts) of water. Then remove clothes from the room and boil them in common water for half an hour.

Burn all of the food which the patient leaves.

All discharges from the nose, mouth, kidneys, and bowels must be received into vessels containg a strong solution of carbolic acid, which is made by mixing 5 ounces of pure carbolic acid with 1 gallon of water. The discharges must be allowed to remain in this solution for one hour before being thrown into the water-closet or privy.

In case of death, wash the body with the strong carbolic solution. The burial must be private.

After the patient has recovered, or, if the patient dies, after the body has been removed, disinfect the room which the patient has occupied in the following way: Remove from the room and boil all crockery, silver, or plated ware; all cotton, linen. or woolen articles which have been in the room must be soaked in the weaker solution of carbolic acid for half an hour and boiled, as previously directed. Open the windows and allow the dust in the room to settle. Then wash the wood-work, floors, windows, and furniture with the weaker solution of carbolic acid, made by mixing 2½ ounces of pure carbolic acid with 1 gallon of water. Be especially careful to wash the dust from over the doors and windows. Remove all paper from the walls and burn it. Then either whitewash, paper or paint the

walls and ceiling. All bed-ticking, mattresses, pillows, and all upholstered parts to furniture, must be sponged with the weaker carbolic acid solution, and then taken out and thoroughly beaten and brushed. Finally, after these directions have been carried out, the room should be thoroughly aired for two days by opening the doors and windows.

Do not allow any child who has had scarlet fever to attend school until four weeks after the disappearance of the eruption.

Remember that canker rash, scarlet rash, and scarlatina are the same as scarlet fever, and the same precaution must be used. Severe forms of scarlet fever may be caught from mild cases.

In diphtheria, all secretions from the nose and mouth must be received upon cloths which can be burnt, or into a cup, which can be disinfected with the stronger solution of carbolic acid.

PHYSICAL AND PSYCHICAL CHANGES IN WOMEN FOLLOWING THE REMOVAL OF THE UTERUS AND OVARIES.

Glaevecke contributes an elaborate paper on this subject to the *Archiv f. Gyn.*, Bd. xxxv., Heft 1. He considers the subject under two heads, the first including the effects of removal of the ovaries; the second, the changes brought about in the organism by extirpation of the uterus. His deductions are as follows: After removal of the ovaries, menstruation ceases permanently in eighty-eight per cent. of the cases, either at once, or after a certain interval, while in the other twelve per cent. the flow becomes scanty and irregular. Vicarious hemorrhages are rare. In one-half of the cases observed the menstrual molimen persisted after the cessation of the flow. The usual climacteric phenomena, vertigo, irregular sweating, leucorrhœa, etc., are common, as well as the atrophy of the genital organs which follows the establishment of the menopause. Even when the uterus is considerably enlarged, by reason of the presence of chronic endometritis or fibroids, it commonly returns to its normal size after oophorectomy, or even becomes atrophied. The general condition usually improves after castration; in forty-two per cent. of his cases the patient becomes stouter. Sexual desire was diminished in the majority of the cases; in some instances it is extinguished. The physical distubances were most marked, some times amounting to melancholia. In short, says the writer, removal of the ovaries induces an artificial menopause which is exactly similar to the natural one.

Total extirpation of the uterus in his experience of course led to complete cessation of the menstrual flow (even the vicarious loss), although the molimen was frequently present during the months immediately following the operation—a phenomenon explained by the periodical pelvic congestion due to persistence of the ovarian function. When the ovaries were not removed with the uterus, they suffered little appreciable change in size, although they tended to become atrophied on account of their lessened blood-supply. In every instance ovulation continued until the menopause. The effect of the operation on the body in general was not so marked as removal of the ovaries. The sexual feelings rarely suffered change, and in upwards of one half of the cases there were no psychical disturbances. In one-third of the cases depression was noted, which under favorable circumstances might terminate in melancholia. In conclusion, the inference was unavoidable that removal of the ovaries produced a far more profound impression upon the entire organism than did extirpation of the uterus alone.—*Am. Jour. Med Sc.*

ABNORMAL COITUS.

Coition and conception take place under the most discouraging circumstances, and many and curious are the stories told about them. Congenital malformations of the vagina are unfortunate, but necessity proves the mother of invention. Carl Braun and Theodore Wyder have both reported cases where atresia existed and impregnation took place through the urethra, the vaginal canal opening into the urinary channel. Then we have the case where the vagina was closed, yet there existed a vesico-viginal fistula behind the atresia The male organ dilated the uretha, then entered, deposited the semen in the bladder; it sailed across the briny deep then entered the vagina and went on to meet the ovum. Boyenard relates a case in his own practice where there was a continuous flow of urine from the os uteri, arising from a vesico-utero cervical fistula, yet conception and delivery followed. One case, that of Louis, is reported where there existed a deep-seated atresia of the vagina, which opened into the rectum. This case was carefully discussed by theologians of a century ago, and finally resulted in a bull by Pope Benedict XIV, allowing in this case that coitus take place through the rectum, by way of which channel it was also necessary to deliver the child. Kroner's statistics tell us that only ten per cent. of women who have vesico-vaginal fistula conceive. In many of these cases menstruation ceases, and pregnancy does not occur. It would seem that the fistula alone is capable of preventing menstruation and consequently ovulation. In some cases it must be admitted that ovulation continues, and the urine must be the preventative of conception. It is probably the acidity of the fluid which robs the spermatozoa of their independent power of action or directly kills them. Simon, Fehling and Winckel report cases where conception took place, though transverse obliteration of the vagina had been attempted on account of intractable fistula and only partially succeeded. Perhaps the urine had been retained in the pouch, become alkaline, and thus lost its fatal effect upon the semen. In some cases the urine probably acts a mechanical preventative to conception by washing away the semen. Recto-vaginal fistula seems also to prevent conception, but the reason cannot

be determined, unless it be that the husband is thereby discouraged and disgusted.—*Ind. Med. Jour.*

STERILITY.

How variable is woman. Mathews Duncan reports the case of one where the easy birth of a single child exhausted the fecundity of a healthy woman of twenty five years of age at the time of birth, and completely ruined her general health during the remaining child-bearing period of life. This woman was examined by many physicians, and all concurred in finding no cause of the weakness and inability except the child-bearing. To offset this we have the case reported by Ansell, in which a woman married at twenty-one, and in twenty-seven years gave birth to twenty-five children, who all reached adult age, and the mother died at the advanced age of eighty-eight years.

Alcoholic drinks are considered by Duncan to have a bad effect on the child-bearing woman. It seems not necessary that the woman should be a drunkard, but only use alcohol immoderately. Perhaps it is only a kind of overfeeding which is known to be detrimental, but this is hardly the only source of trouble. Cases are reported in which patients suffered from sterility, but physical examination and other modes of inquiry have been unable to discover any evidence of disease of the internal genital organs, yet a change to habits of tetotalism was followed by conception. The use and abuse of alcohol, as we all know, produces in addition to general or constitutional disorder well marked chronic ovaritis. This ovarian inflammation comes and goes as the patient comes and goes to her beloved drink. On the contrary, how often do we find in the squalid home of misery drunken parents surrounded by a house full, or more probably a room full of children, always ragged. —*Ind. Med. Jour.*

DIETETIC TREATMENT OF BRIGHT'S DISEASE.

The treatment of chronic renal affections by special forms of diet has recently been the subject of a series of investigations by Professor Schreiber, of Konigsberg, whose results are of some interest in view of the present position of the question. He traverses Senator's statement that one ought in cases of albuminuria to forbid the use of eggs, holding that their injurious influence is open to question. He took for the purposes of experiment eight people suffering from kidney disease, to whom he gave along with their ordinary diet six to ten eggs daily. Before the beginning of the experiment they had been under observation from four to eight days, on the usual diet, until the fluctuations in the amount of albumen in the twenty-four hours had been determined, the estimations being likewise made for several days after the eggs were discontinued. In four of the cases the eggs were administered boiled; in the others, raw. In the former group, the patients received six eggs daily, and in none of them during the period of administration of the nitrogenous food could any fluctuation or increase in the amount of albumen be determined. In the second group, six to ten raw eggs daily not only did not show an increase in the excretion of albumen but actually led to a considerable diminution. Similar results have also recently been recorded from Leyden's wards. These observations also agree with those of Oertel, who has stated that the addition of a great quantity of albuminous food may affect albuminuria favorably. Schreiber maintains that none of the three forms of diet—mixed, meat, or milk —appears to be capable of influencing constantly and unmistakably the excretion of albumen in kidney disease—a result, he thinks, although really negative, to be nevertheless received with satisfaction when one considers that patients can never stand for any time a one-sided diet. In discussing the question how a patient suffering from Bright's disease ought to be dieted, Schreiber recommends that to an ordinary mixed diet should be added fluid or coagulated albumen, meat and other nitrogenous substances, and as there is not less albumen passed under a pure milk diet than under a nitrogenous one, it succeeds better to combine the two and adds to the body weight. A special diet for Bright's disease is not in the least indicated—it ought to be founded on the broadest basis, bearing in mind that the disease is an affection gradually and steadily consuming the bodily strength; while the forms of diet should be given according to the want and necessity, and without the unjustifiable and exclusive endeavor to compensate or change the loss of albumen by the urine. —*Berliner klin. Wochenschrift.*

FOOD TREATMENT FOR INSOMNIA.

Dr. Eggleston, in an article in the *Jour. of Am. Med. Association*, says that most students and women who are troubled with insomnia are dyspeptic, and he has found it easy to successfully treat such cases without medicine. They are instructed to eat before going to bed, having put aside work entirely, at least an hour before. If they are not hungry, says the author, they should simply be instructed to eat; and if they are hungry, they should eat whatever they want. A glass of milk and a biscuit is sometimes all that can be taken at first, or a mashed potato buttered. In a short time the night appetite will grow, and the appetite will then need no particular directions. If possible the night meals hould be taken in another room than the sleeping apartment, and for men in the city it will be found advantageous to go out to a restaurant. The idea of going out for something to eat and having to wait a short time for it will excite the appetite. Before eating, however, a bath should be taken; I much prefer cold or cool baths, which should be given with a sponge or stiff brush, and the body thoroughly rubbed off with a coarse towel

afterwards. The bath need not be more than five minutes in duration. * * * After the bathing and rubbing, or after eating, a moderate amount of exercise should be taken. For this a few minutes with Indian clubs or dumb-bells is sufficient. Further than this, the patient should go to bed at the same hour every night and arise at the same hour every morning. * * * Since the age of eighteen I have been troubled more or less by insomnia, and nothing has ever given such decided relief as a course of hearty meals just before going to bed. When the temporary insomnia has been relieved by this, I continue the sponge baths and exercise before going to bed; but sleeplessness often returns after a sustained degree of mental labor and excitement, and is almost immediately relieved by a general hearty meal before going to bed. * * * I now make it a rule never to go to bed hungry, and always to eat at night when I am in the midst of an unusual amount of work, or engaged in work of an unusually exciting character. * * * There is a popular superstition that grown people should not eat immediately before going to sleep; that it will give them indigestion or nightmare, or both. I cannot see why adults should be so very different in this respect from babies. We know that young children awake at night and must have something to eat before they will sleep quietly; and some children actually fall asleep with the nursing-bottle leaking into their mouth. It may be true that digestion is carried on slowly during sleep, and that the digestive function is less active, but here one need not be in a hurry for the completion of the operation. The average person should be in bed seven or eight hours, which is time enough for the digestion of almost any edible. In our American life I think the digestion carried on through sleep probably has better chance for thoroughness.—*Med. Times.*

VENESECTION IN PUERPERAL ECLAMPSIA.

Dr. McKinnon, in *Can. Pract.*, drew attention to the fact that this is no new treatment, but rather a return to old practice. He warned the younger members of the profession against placing any confidence in bromide of potassium, or even chloral, in this critical condition. The inhalation of chloroform he considered a very valuable remedy or adjuvant, but would not rely on the fashionable treatment by hypodermatics of morphine. He was inclined to believe that venesection saved more lives in puerperal eclampsia than all other remedies. In puerperal eclampsia he believed the patient died from brain pressure, due to serous effusion, hemorrhage, or edematous infiltration, and that venesection is the most effective method of preventing this brain pressure during a convulsion; he referred to the occurence of sub-conjunctival and retinal hemorrheges which he had frequently seen. He did not advocate venesection as a measure to arrest the convulsion, but by diminishing the tension of the cerebral vessels to disarm the convulsion of its fatal power.

The following is a guide to the treatment when called to a case of puerperal eclampsia:

1. Bleed the patient, if convulsion be severe or followed by coma.
2. Control the convulsion with chloroform.
3. If patient be at full time, take steps to terminate labor as quickly as possible.
4. Administer an active purgative; Epsom or Rochelle salts.
5. If the convulsions recur, give a large hypodermatic of morphine.—*Arch. of Gyn.*

GENIUS, MANIA AND CRIME.

While it is fully recognized by medical men that genius and insanity are sometimes curiously intertwined in the same person, or are displayed in closely connected members of the same family, it is not so easy to trace the connection between these mental conditions and those sinful or criminal acts which are apt to be committed by persons so organized. The medical profession recognizes forms of affection or moral insanity in which the capacity to govern the emotions is in abeyance. In this phase of mental disease a marked feature is the absence of delusions; hence the conflict of opinion between the medical aspects which often arises where the question of criminality has to be taken into consideration. A person is often tried and condemned by the law, but is exonorated and protected by medical judgment which is permitted to supersede the legal judgment. Thus the condemned criminal escapes the gallows, becomes an object of pity and commiseration, is protected by and at the expense of the State, and saved henceforth from further harm to himself or others. He may have been —nay, indeed often is—a person of the highest talent or even genius. The Rev. Wm. Dodd, a canon of the church, the unfortunate English divine who was executed on the 27 of June, 1777, for forgery, after trial at the Old Bailey, is an instance in illustration of the insufficiency of the law acting apart from medical judgment, which unfortunately in those days had not acquired the authority it now possesses. In our day, where doubt exists the law leans to the side of mercy, that quality which is "twice blessed." Where the acts of the subject of moral mania are criminal, the question of his responsibility is settled with much difficulty, even when, as in such cases, every opportunity of investigation is afforded. How much more difficult, then, must it be to arrive at a right judgment in those cases of moral mania where the acts are sinful but not criminal. The law does not come to his rescue. He is not the subject of delusions, yet his acts are the acts of "madness, not badness." He may inflict on himself the punishment of degradation and ruin, and life-long misery on those previously near and dear to him. He bears the scorn of his former friends, and in his lucid intervals feels keenly. But when the impulse is on him, nothing but the absolute control of others is sufficient to check

his wayward career. The influence of religion may have some weight on him, but unfortunately it is too frequently the case that the strongest faith is inadequate to stay the downward course. Men are apt to judge their fellow-men uncharitably, and to deal harshly with them, believing them to be capable of exercising restraint over themselves, while all the time nothing short of enforced restraint and medical treatment can avail.—*Lancet.*

LYING-IN TOILET.

J. B. Dunham, M. D., in *Med. Era,* says: "On entering the lying-in chamber with clean hands and a clear head, whether it be in hovel or palace, determine by the usual method that labor has begun or is about to begin, ask the patient to leave the bed for a few minutes, while you prepare it. The information frequently offered by some attendant, that "I have made her bed," means that it is so prepared that when labor is ended everything within reach is soiled.

You should undress the bed to the mattress. Fold a sheet crosswise, with folded edges lying at the head of the bed. Over this spread a rubber blanket or oilcloth; over this a sheet. Now fold a sheet as a mother does a diaper, and lay it across the bed, to be used in dressing the patient for her labor. Now direct the nurse to put the patient to bed, and before retiring that her garments should be neatly folded about the chest and back, baring her to the waist.

The abdomen, thighs and genitalia are now protected by the large diaper. The usual covering to suit the patient's comfort completes the preparation.

The third stage of labor terminated, the placenta is carefully examined, placed in a heavy newspaper and quietly cremated. With a receptacle at hand, the folded sheet is now removed, and with its removal comes ninety per cent of the detritus. An assistant on the opposite side of the bed now gathers, as do you, the rubber blanket and overlying sheet, and carefully draws them towards the feet. As the buttocks are reached, stop and give the woman a very careful but thorough antiseptic bath. Dry the parts, and apply on a napkin your favorite antiseptic. Remove the sheet and rubber blanket, placing necessary protection over the mattress. Upon this, whstever it be, sprinkle antiseptic fluid.

Draw the upper half of the sheet first laid upon the bed to the feet. Apply a bandage, if you use one. Draw the clothes down, and the new mother is ready to rest.

Advantages offered. First. All ladies appreciate any effort upon the part of the physician to lessen the disagreeable features of parturition.

Second. A cremated placenta is inoffensive.

Third. An antiseptic bath given by the one upon whom the responsibility of the case rests is more likely to be carefully given than by another person.

Fourth. Anyone who has attempted it knows how difficult and unpleasant is the operation of dressing and undressing the new mother. How slight in comparison the mere drawing toward the feet of the chemise and gown."

A TRAGEDY—IN SIX LETTERS.

A

She looked into the druggist's eyes—
This sweet Detroit maid:
"Can you some castor oil disguise,
Sir, so it won't taste?" she said.

B

"Of course I can, with greatest ease,"
Was the smiling clerk's reply.
"And whilst it's being done, say, please,
Will you our soda-water try?"

C

The soda-water charmed the miss,
So nicely was the syrup mixed.
"Thank you," she said, "for this;
I'll wait till you the oil have fixed."

D

Full twenty minutes passed away,
He waiting on others, well and sick.
"See here, young man," said she, "I say,
I want that oil, and want it quick!"

E

"My dear," did the dapper clerk reply,
His eyes mischievously winking,
"The oil you wished I put, on the sly,
In the soda you just were drinking!"

F

"O Lord!" she groaned, with deep-drawn sigh,
Her cheeks, the hue of a lobster,
"The oil was not for me, O my!
'Twas for my baby sister!"

—W. M., in *N. Y. Weekly.*

The Baking of Bacilli.—Dr. A. Jacobi (*Medical Record*) denounces Weigert's advertising scheme and records his own experience in the use of hot air in treating phthisis. Weigert, supposed to be an American physician, now of Germany, claimed to have discovered a method of curing phthisis by the inhalation of hot air and he made free use of Dr. Jocobi's name in advertising his apparatus for carrying out this treatment. The treatment was not original with Weigert, nor had Dr. Jacobi, as had been asserted, bought, indorsed or recommended the apparatus in question. Moreover, as appeared further along, he had little confidence in the method. To Halter belongs the honor of suggesting the treatment of phthisis by the inhalation of hot air with the view of killing the bacilli in the lungs. The idea arose from observing the immunity from phthisis of workmen in a lime-kiln where they were exposed to a high degree of heat, 122° to 158° F., so high that it would destroy the tubercle bacilli provided it continued at that degree until it had reached the lungs. The air inhaled

by workmen in a lime-kiln was dry and rarified. A moist atmosphere of a like temperature would be more destructive to the bacilli, but was less endurable by the phthisical patient. Dr. Jacobi said that having been requested to admit Weigert's apparatus into his wards at Bellevue Hospital, he did experiment with it some time ago, and for a while the results made a favorable impression on the physicians in attendance, for the patients, or a part of them, seemed to improve under the treatment. More careful observation, however, showed that the improvement was doubtless due to rest in the hospital, in an atmosphere much purer than that in which the patients had lived in their tenement homes. The instrument itself was not as good as that which one of ordinary ingenuity could improvise; the atmosphere on its way to the lungs from the flame was found to have fallen from above 300° F., to about the temperature of the body when it had reached the mouth. Of course if it were above the temperatnre of the blood it would become further cooled on its passage toward the lungs. Some of the hot air might get into the alveoli, but very little. In order to obtain benefit from such treatment it would be necessary not only that the air inhaled be of a high temperature, but that the patient be in a room in which the thermometer registered at least 105.5° F. In other words, it would be necessary to produce a sort of artificial fever, and it was evident that such treatment must prove injurious to any other than patients in the very first stage of phthisis. He added that two of his patients suffered from cough and vomiting during the treatment with hot air, and were distinctly better when it was discontinued.—*Am. Lancet.*

Treatment of Pneumonia.—Dr. Kreider, at the Illinois State Medical Society, concluded as follows of the treatment of pnuemonia:

1. That baths should only be given in those cases which are not progressing favorably.

2. In severe cases nothing is calculated to give so much relief to all bad symptoms.

3. Rules for selecting cases and administering baths cannot be rigidly given. The thermometer is not always a guide for their administration. Difficulty of respiration and lack of secretion should lead to their employment regardless of the height of the mercury.

4. The bath should be given at a temperature of 100° or less, depending on the severity of the case and the condition of the patient. Baths of extremely low temperature have not been found necessary as yet, but I should not hesitate to employ them if occasion should require.

5. Stimulants should be given just before entering and coming out of the bath tub. The patient should not exert himself in the least.

6. The physician should himself superintend and aid in giving the bath. This rule can only be broken by having trained nurses who are competent to meet emergencies which might arise.

7. The bath treatment is capable of shortening the duration of the disease and convalescence, and of reducing mortality. Liebermeister says it has been reduced in his hands from 25 to 10 per cent. The ice coil will be found effective in the milder cases in reducing temperature and relieving pain, if placed directly on the affected side.

Atony of the Bladder—Methods of Treatment.—Dr. J. W. White (*Universiiy Mag.* July, '89) groups the methods of treating atony of the bladder thus:

1. Catheterization. The patient should be instructed in the use of a catheter, and should also be told how to keep that instrument aseptic, and how for greater precaution to disinfect it before each insertion. He should use it, in cases where four ounces of urine are retained twice daily, night and morning; if the residual urine reaches six ounces he should use the catheter once every eight hours; and if it amounts to eight ounces catheterization should be employed every six hours.

2. Irrigation of the bladder with cold boracic solution beginning at a temperature of 90 to 100°, and gradually reduced. Or permanganate of potassium in the strength of two or three grains to the ounce will often be found of great use.

3. Electricity is often of considerable benefit, and may be applied in the manner long ago suggested by Sir Henry Thompson. An insulated electrode is carried into the bladder, and the other moistened electrode placed over the hypogastrium, a weak current being passed directly through the walls of the bladder. The strength is gradually increased until slight sensations of discomfort are experienced. The application may be varied occasionally by putting the other electrode into the rectum. In mild cases which have come under my care immediately after the occurence of over-distension, this is an extremely useful adjuvant, but in later and more serious cases I have not found it of much benefit.

4. Strychnia is the only drug which, in my experience, has seemed to produce beneficial results in these cases; and even upon it but little dependence can be placed. It may be given in combination with ergot, cantharides, or the tincture of the chloride of iron.

BROWN-SEQUARD ELIXIR.

——————, Aug. 15, 1889.

——————, M. D.

Dear Sir:—Please excuse me for troubling you in this way, but having seen so many wonderful cures in papers effected by Elixir of Life, discovered by Brown-Sequard, I write to ask if, in your opinion, I can prudently try the same experiment. Hoping that you will excuse this presumption on my part. Please reply at once. I am yours with respect,

——————.

[From a young lady out of town to a prominent physician of Baltimore.—Ed.]—*Md. Med. Jour.*

LAXATIVE SALINE MIXTURE.—

℞ Sulphate of soda,
Salt of seignette (tartrate of soda),
Cream of tartar, - aa. 20 grammes.

For one pint of water.

M. Sig. One glassful before breakfast.—*Times and Reg.*

ANTISEPTIC COTTON may be prepared with the following solution:

℞ Mercury biniodide, - - - p. 8
Potassium iodide, - - - p. 3
Glycerine, - - - - - - p. 120
Distilled water, - - - q.s ad. p. 2400

Dip absorbent cotton in the solution and then dry it. —*Can. Pract.*

FOR TAPE-WORMS IN CHILDREN.—The *Lyon Medicale* gives the following formulæ as effectual and agreeable:

I.

℞ Oleoresin of aspidium, - ʒj. to ʒijss.
Peppermint water, - - - f ℥ss.
Essence of anise - - - - gtt. x.
Chamomile water, - - - f ℥j.
Syrup of sugar, - - - - f ʒv.
Syr. of bitter orange rind, - fʒv.

II.

℞ Oleoresin of aspidium - - - ʒj.
Calomel, - - - - - - grs. vj.
Sugar, - - - - - - - ʒij.
Gelatine, - - - - - - q.s.

Make into the consistency of jelly, and administer as a confection.—*K. C. Med. Rec.*

TREATMENT OF JAUNDICE FROM RETENTION.—Dr. LeGendre gives (*Concours Med.*) the following treatment for this affection:

1. *Absolute Milk diet*, consisting of five pints of milk taken pure or in an alkaline medium, in quantities of eight ounces every two hours.

2. *Intestinal antisepsis*, for which the following powders are to be taken:

℞ B. Naphthol (finely powdered), - 23 grs.
Salicylate of bismuth, - - 15 grs.

M. Divide into ten powders; one to be taken every time that some milk is taken.

3. *Sponging the body* every morning and evening with cold water, to which the following has been added:

℞ B. Naphthol, - - - 1 part.
Water, - - - - - 5000 parts.

Heat and dissolve, filter and allow to cool.

4. *Purgatives* of a sodic base (such as sulphate of soda, etc.), to be taken every third day.

5. *Inhalations of oxygen*, or air baths, if circumstances permit.

Although insomnia is often a troublesome symptom in this affection, it is best not to give any hypnotics, especially not morphine. Sleeping can frequently be induced by calming the troublesome itching with the following lotion:

℞ Sublimate,
Chlorhydrate of ammonium, aa. 5 grs.
Camphorated alcohol, - - - ʒj.
Cherry-laurel water, - - - ℥jxss.

M.—*Rev. de Therap., Med. News.*

MENTHOL AS A PAIN RELIEVER.—The *Wiener klin. Wochenschrift* of March 7, 1889, states that menthol, which, on account of its great anodyne action, has been largely used as a local applicant, has of late been administered internally as an antineuralgic in hemicrania, intra-orbital neuralgia and headache, as well as for the relief of the pain of rheumatism and sciatica, in doses of from four to fifteen grains.

Dr. Mac. Laury (*Therap. Gazette*) gives the following prescriptions for the administration of this preparation:

℞ Alcohol, - - - - - - ℥j.
Menthol, - - - - - - ʒij.
Glycerin,
Simple syrup, - - - - aa. ℥j.

M. One teaspoonful in warm water when required.

℞ Menthol, - - - - - - ʒj.
Sugar of milk, - - - - grs. ix.

M. Administer in twelve capsules; one or two capsules to be taken daily.

Menthol can also be combined with antifebrin or antypyrin, as in the following:

℞ Menthol,
Antifebrin, - - - - aa. ʒj.
Sugar of milk, - - - - q.s.

M. To be divided into 24 powders, administered in capsules; two to be taken daily.—*Med. Chronicle.*

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE U. S. MARINE HOSPITAL SERVICE.

ENDING AUG. 24, 1889.

Long, W. H., Surgeon, to proceed to Gallipolis, Ohio, as inspector, Aug. 7, 1889.

White, J. H., Passed Assistant Surgeon, granted leave of absence for thirty days, on account of wound, Aug. 16, 1889.

Condict, A. W., Assistant Surgeon, detached from Revenue Bark "Chase" and ordered to Louisville, Ky., for temporary duty, Aug. 19, 1889.

Groenevelt, J.F., Assistant Surgeon, ordered to South Atlantic Quarantine Station, for temporarary duty, Aug. 8, 1889.

ORIGINAL ARTICLES.

A CASE OF LAPARO-HYSTERECTOMY FOR MULTIPLE FIBROIDS OF THE UTERUS.

BY FRANK A. GLASGOW, M.D., ST. LOUIS.

Read before the St. Louis Obstetrical and Gynæcological Society.

Annie T., a native of Ireland, æt. 40 years, single.

The patient entered the St. Louis Mullanphy Hospital, January 21, 1889, complaining of intense pain over a tumor which filled the pelvis and projected some distance above the brim. The pain was accompanied with fever and vomiting, the latter being very frequent; there was constipation. She was sent to me by her physician, Dr. Thomas O'Reilly, for operation. The patient states that she first noticed the tumor eight or nine years ago, at which time it was in the left side. It seemed to move from one side to the other.

Her menstrual periods were very irregular; the flow was profuse and lasted seven or eight days. Her health was otherwise good. The profuse flow lasted until two years ago, when after receiving treatment it became less, and lasted only four or five days. Shortly after ceasing treatment the flow increased and continued five to seven days. More blood was lost when the patient was on her feet. For the last few years the bowels have been very constipated, sometimes not being emptied for two weeks at a time.

She had some pain in her bowels for one month prior to entering the hospital. Two days before entering she began to feel bad, and one day before, she was forced to leave her work in order to lie down for a few minutes. While lying down she was taken with a most violent pain and cramps in her abdomen over the tumor. The pain was so severe as to cause her to scream out. Vomiting set in, and the tumor on the right side became very sensitive. When she entered she was vomiting.

An examination revealed a hard, nodular, irregular tumor, extending some distance above the pubis and filling the whole pelvic cavity. There was a distinct depression near the median line. The tumor to the right was extremely sensitive and gave a distinct crepitus on palpation. The remainder of the tumor was not sensitive. The mass in the median line and to the left was almost immovable, but that to the right could be moved slightly. A vaginal examination showed the cervix to be displaced anteriorly, looking forward and not very high. I thought I could outline the body of uterus imbedded in the posterior surface of the tumor, but judging from the appearance of the tumor since removal, I was probably mistaken.

The sound penetrated posteriorly to the normal depth and would not go farther. The whole of the pelvis except the lowest portion was filled. The mass to the left seemed to have grown into a ligament, and this afterward proved to be the case. This part of the tumor was almost fixed. The patient's general condition was not bad. The lower bowel was empty. Temperature 99.2°. I examined this patient three years ago, and my notes made at that time show the presence of a small fibroid (size of small lemon) to the left of the uterus. This I believe to be the same as the movable pedunculated fibroid, which has been pushed to the right by the enlarging uterus and the mass growing below it in the broad ligament.

Turpentine stupes, hot flax-seed and hop poultices, and full doses of opium every three hours, was the treatment employed. Rectal injections brought away little.

January 22. The cramps continued and no urine was passed for twenty-two hours. Calomel gr. j, sodii bicarb. gr. v, were given until eight doses were taken, then clysters. Opium when in much pain.

January 23. Somewhat easier. Has had one small passage. Temperature early in morning normal, but at 5:30 P.M. 99.8°. Pulse 89.

January 24. Tumor seems larger. Catamenia have commenced. Has constant desire to defecate, but with very little result attending efforts. For the next ten days salines were administered, but with little effect.

February 3. The patient began again to complain of pain over the ascending colon and had some fever.

After explaining to the patient the danger of an operation, also the danger which she ran from mechanical obstruction of the various organs, she readily consented to an operation, and said that that was her reason for coming to me.

February 5. The patient received a large enema and a vaginal injection early in the morning and later I proceeded to operate. The preparatory treatment of the patient was as usual for laparotomies.

The incision was made in the median line and had to be extended high up in order to allow the removal of the fibroid to the right. This had to be removed before the main mass could be dealt with. I found the fibroid attached to the uterus by a pedicle as thick as my finger.

Posteriorly the tumor was attached quite firmly to the gut and this had to be separated before the tumor could be moved from its location. I brought this tumor out of the cut, tied the pedicle and cut it off.

I now found it very difficult to move the main mass but gradually worked it up out of the cut, though it required much strength and perseverance. The tumor had developed in the broad ligament.

By the time the clamp was adjusted the patient was in a critical condition, and the tightening of the instrument very materially increased the depression.

The left ovary, tube and upper portion of the ligament were included in the clamp, which was a Keith's instrument.

Hypodermic injections of ether and brandy were given. The patient's condition being so bad, I did not consider it best to remove the other ovary.

The peritoneum, as far up as it was to come in contact with the stump, was sewed to the skin of the abdomen.

Deep and superficial sutures of silk were used in closing the incision. A glass drainage tube was introduced. The stump was trimmed off about $^3/_8$ inch from the clamp, and well seared with cautery irons. Iodoform was afterward well rubbed in.

The dressing was bichloride gauze and iodoform, and over this absorbent wool, well baked. Baked wool is very hygroscopic and I hoped in this way to help dry up the pedicle. Over everything was placed dry absor bent cotton, and two flannel bandages, the innermost bandage being split and passing under the arms of the clamp. The patient's condition was fair when removed from the table. Up to the ninth day the history was uneventful, there being no peritonitis. The diet was as usual in laparotomy cases. The catheter had to be used. About a tablespoonful or less of bloody serum was drawn from the tube every six or eight hours for the first five days, the tube each time being cleansed with 2% carbolic solution. On the sixth day the tube was withdrawn and some gauze stuffed into the hole.

On the ninth day the whole wound was dressed. All seemed to be nicely healed, but the stump was softening a little at its base. The patient was now removed from the special ward to the general ward.

Three days later suture abscesses developed. The suture holes were enlarged and the abscesses washed with hydrogen peroxide and solution of bichloride. They healed promptly.

After the tenth day the patient would occasionally have cramps and would cry out lustily. I attributed this to adhesions of the intestines which I probably had not detached. The bowels were still very sluggish although she had received salines from the second day after the operation. The clamp had been tightened every day a little until it became so rusted from the bichloride and iodoform that it would not move. On the sixteenth day, after much labor with a pen-knife I succeeded in cutting off the stump on a level with the upper surface of the clamp. It was of the consistency and appearance of very dry salted beef (chip-beef). Having secured the stump below the clamp with a strong silk ligature, to prevent it being draw inward when the clamp was freed, I separated the clamp. This silk was fastened to an old pair of forceps widely opened. The wound contracted promptly but the slough separated very slowly.

The slough extended some distance below the clamp, which is, I believe, generally the case. This should teach us not to have the clamp fit too closely to the abdominal wall, for fear some of the slough may extend into the abdominal cavity, and the latter occurrence may explain the loss of some cases. In the above described case I had drawn gauze underneath the clamp into contact with the stump. There had been no crushing done except by the clamp itself.

In the slough was left a bright-red round mass, pedunculated and well provided with visible blood-vessels. I suspected this to be the right ovary (although it looked unlike it)and so left it out of curiosity. On the twenty-sixth day, as it had been for some time the only thing which kept the wound raw, I cut it off and removed it; I found that it was a small fibroid.

March 12. There was very little pus in the wound. Bowels were very costive. The patient looked bad but had no pain except cramps when bowels moved.

I thought that perhaps the iodoform dressing might be depressing her, so I changed it to dry boric acid. I continued the gentian and iron mixture which she was taking.

By May 26, the patient had a dust-colored, cachectic look and was evidently going down hill, although she had no tangible complaint. I noticed that however much boric acid was placed on the stump, there was none of it the next day.

I knew that the greater part was liquefied and absorbed, but I had noticed this same appearance when patient had been taking boric acid internally. I stopped the boric acid as a dressing, using bismuth instead, and kept her on the same internal treatment in order to test my theory. In a few days she began to gain strength and before long her color returned and her bowels became more manageable. It would be well for others to notice whether this often happens when boric acid is used a length of time as a dressing. It is the first time that I have noticed it.

Just two months after the operation the last dressing was applied, everything having been well for some time.

I saw the patient lately, and did not know her, as she had become more fleshy and seemed in blooming health, which was the case. From June 1 to 8, her breasts enlarged and she felt as if she were going to be unwell, but this passed away without any flow. She still has frequent micturition going every hour or so but not as before the operation, every fifteen minutes. Her bowels are perfectly regular, the passages being daily.

I made a digital examination, and found the vaginal condition to be perfectly normal; no one would suspect that the uterus had been removed. With one hand over the cicatrix, one can easily demonstrate the connection of the cervix with the abdominal wall by means of a band or cord of tissue. The parts are not sensitive.

The tumor or rather the tumors removed are, as you see, made up of a large irregular mass, including the uterus, and presenting many pedunculated or partially pedunculated masses attached to it. One of the pedunculated tumors is not much smaller than the main growth. This was attached by a pedicle as thick as my finger. The whole weighed five pounds. The large pedunculated tumor is of a dark bluish color on one side, and its cut surface appears much darker than the tumor elsewhere. I have examined the portion under the microscope, and believe it to be, not an infiltration of blood or an inflammation, but a sarcomatous change. This is the tumor over which the pain and crepitus was felt, and the latter, when I first saw the patient, I at-

tributed to a change due either to twisting of its pedicle or an inflammation from injury. On viewing this tumor I feel gratified that I operated, and believe that I did the only thing that offered her a hope of relief. From the shape of the tumor I should not expect much relief from electricity as it could not be applied thoroughly.

As I know that some about me, whose opinions I very much esteem, are very conservative, and possibly would not have operated when I did, I feel it incumbent on me to make some defense of my action.

1. The patient was poor and not able to take a long course of treatment even if it were gratuitous.

2. She was compelled to micturate every fifteen minutes, which seriously interfered with her ability to earn her living.

3. The proper evacuation of her bowels was seriously interfered with, she sometimes going two weeks without defecating, and then only with the aid of powerful purgatives.This offered the probability of complete obstruction occurring,necessitating a hasty laparotomy, without the safeguards to make it successful.

4. The rapid growth of the tumor in a young woman.

5. The excessive menstruation, although this was not dangerous.

Taking all of the circumstances into consideration, I feel that I took the only proper course.

Some may censure me for my first reason given for operating. A surgeon some years ago in Philadelphia, I believe, was almost ostracized for offering this same reason for an operation. If you will recall the cases of tumor which you have seen among the poor, in women incapable of earning a living, dependent on those hardly able to supply themselves with the necessties of life, wanting everything, not knowing one moment of relief from sufferings which would have served Dante in his portrayal of the torments of hell; if you will recall these cases, I say, can you deny that the financial condition of the patient, should be a potent factor in determining the treatment? We should tell them honestly the chances of recovery and death, and let them choose. They know their sufferings best. If we have a patient who can command all the comforts and treatment necessary for an amelioration, or improvement, of her condition, by the electrical or ergot treatment extending through months and perhaps years, and if the symptoms are not very urgent, then we should not for a moment advise a surgical operation. If the symptoms are urgent, if some of the organs of life are suffering, if the patient is steadily losing ground, we should urge an operation. We should not wait until the patient has one foot in the grave. That is not conservatism, it is cowardly old fogyism, which I know you all condemn. We should recollect that we can now do safely, what fifteen years ago was almost certain death. I have thought that this case would be of interest, as there have been to the best of my knowledge but two or three successful cases reported in this state.

P. S.—Since writing the above I have seen the patient several times. She has developed a very interesting condition. To begin with her general health is perfect excepting an occasional headache.

During July a small vesicle appeared in the middle of the cicatrix. This was attended with but little pain and in a day or so broke and discharged a little fluid. In probing this opening we found that a small sound could be introduced, and made to project into the vagina through the cervix without causing pain. I suppose that the os externum became clogged, which dammed back the secretions, and forced them to find their way out through the weak scar-tissue. The patient has never menstruated or shown signs of an attempt at menstruation up to this time (Aug. 25). She seems to be near the menopause, judging from the flushes which she feels. I can only account for this on the supposition that the blood-vessels of the remaining ovary were compressed and hence the ovary has undergone atrophy. I know that the ovary was near the abdominal wound.

AN EPIDEMIC OF ERYSIPELAS.

BY A. B. HOLDER, M. D., MEMPHIS.

A small epidemic of erysipelas with some interest occurred in my practice in the Crow Indian Reservation (Montana) during the winter of 1887-8.

Of 15 cases, which number constituted the epidemic, 14 were among the pupils of the Indian boarding school. The remaining case was a young white man living a few rods from the school and who suffered a most severe attack.

A brief record of this case will be introduced here partly to contrast with other cases occuring in the same epidemic, and partly on account of some peculiarities in the course of the case.

J. C., stout man, good health and habits, æt. 22 years, was struck on the head by a heavy bell clapper falling 20 feet, was not felled or stunned. The scalp was bruised and cut through on the right side at the junction of the parietal and frontal bones. A careful examination discovered no injury to the skull. The wound was dressed and healed kindly, the patient attending his usual duties.

Ten days later, March 13, returning, a mild evening, from a sleigh ride, he felt chilled. Retired, but vomited several times and spent a restless night. Next morning he suffered from headache,slight soreness and stiffness of left side of neck and slight soreness of scalp. Wound healed and not sensitive.

March 15, vomited twice this morning; headache, etc., same as yesterday. Has slept nearly all day and when not asleep is quite dull; when loudly spoken to answers promptly aud correctly, but soon relapes into stupor. Breathing shallow and slow. Pulse quite irregular; yesterday was dicrotic, one full strong beat and a small beat or recoil before the next; to-day, aftera dozen regular beats, ti will intermit or interject for the space of as many more; will bound rapidly for a few seconds, then

beat deliberately. Toward evening breathing, snoring, expiration accompanied by flapping of soft palate and puffing of cheeks. Cheeks and eyes flushed; no irregularities of pupils; no delirium, pulse intermits every third beat.

March 16, Pulse, respiration and stupor improved. Temperature 102°. Scalp too low on forehead, swollen, swelling terminating in distinct ridges; scalp, forehead, neck, side and back, tender; no more tenderness about wound than elsewhere.

March 17, general condition improved. Inflammation spreading as low as nose and eyelids.

March 18, swelling has widened bridge of nose and nearly closed the eyes. Slightly delirious.

March 20, both ears swollen and vesicated. Throat sore.

March 22, right side of face much swollen, eye closed by edema; sweats frequently. Hair of scalp comes out on being pulled upon; face desquamating.

March 25, swelling assuaged. Temperature, pulse and respiration for three days subnormal. To-day 96.5°, P. 54, R. 11. Is convalescent.

March 29, since the 25th has sat up, been about his room and steadily covalescent. Yesterday and last night, some pain, swelling and tenderness on scalp and right ear. At 9 o'clock a. m., to-day began to feel chilly and at 10 a. m., was in the midst of severe rigor, shaking in bed, and body cyanosed; entire surface bluish, extremities especially. Pressure upon skin of right arm leaves white spots and the bluish appearance of other parts of the skin returns very slowly. I never saw a patient so completely cyanosed recover. One o'clock p. m., there was complete reaction, with temperature of 103.2°. Two days later temperature was again subnormal and convalesence was not again interrupted.

March 30, was observed an eruption very bundant over entire chest and more sparse over back, of small vesicles unattended by redness, pain or itching. Sweating had not occurred for some days.

Two cases of the fourteen in the school were plainly traumatic. An Indian boy received a scalp wound from a boot thrown at his head, cutting a gash an inch long. This healed kindly. Eight days after this injury the boy complained of headache, pain about the wound, eyes suffused, diarrhœa; temperature a. m., 100.3°, p.m., 101°. The next evening temperature 104°, vomiting, diarrhœa and, at times, violent delirium. The succeeding morning, temperature was normal, pain and swelling gone from wound and patient about well.

About the same time as the above injury another Indian boy fell against a stove and received a scalp wound above the right temple which healed kindly. Two weeks later the seat of the wound became tender; around it for a radius of two inches the scalp was sensative and elevated. About an inch from the wound toward the right ear was a small lump under the skin, tender, movable, giving to the finger the sensation of a dermoid cyst. Another just like it as large as an almond just behind the right ear. Tendon of right side of neck, sore. Temperature reached 102.2° and gradually lowered, tenderness and "lump" subsiding.

The remaining twelve cases were apparently without open lesion; all occupied the usual seat, on face between brow and lips. Three were typical severe cases with usual symptoms and course. Nine, (four boys and five girls) were peculiar.

In the first of these my attention was called to an enlarged gland in the neck. I observed two or three cervical glands enlarged and tender. The same evening I found a swelling, with well-defined margins, including these glands extending onto the face, under the eye and to the bridge of the nose, very little redness or tenderness. The girl was abed but had no appreciable fever and was entirely comfortable. The next day the swelling subsided and she was quite well.

Several other girls were similarly affected, some remaining abed part of the day, some not at all. None had perceptible fever, no vesication, no desquamation. One boy had a single gland just in front of the ear swollen and tender and the eye on the same side a little suffused and watery; another had one eye much inflamed only on the outer side of the ball; both were well the second day.

Another had slight flush over cheek; tongue pointed and red, bowels constipated and sensitive to touch, temperature from normal to 100.2° for four days, and well.

Another, morning temperature 101.3°, tongue pointed, red, light coated, right eye injected, right submaxillary glands enlarged, headache; temperature, at 6 o'clock p. m., 102°; second day a. m., 100.2°; third day a. m., 100.2°; p. m., 100.8°; fourth day temperature normal; there had been no increase of inflammation of glands after first day; patient returns to duty.

These cases are notable for their mildness and brevity. Several of them could not possibly have been diagnosed erysipelas which they undoubtedly were, except in the light of the typhical cases occurring in the same building at the same time.

It is interesting to observe in the same epidemic, from the same source of contagion and apparently under the same constitutional and hygienic conditions, cases so mild as the suffusion for a few hours of a single eye, or the swelling of a single gland, with no constitutional symptoms, and others so severe as to cause fierce delirium or alarming stupor for hours with extensive vesication, desquamation and loss of hair.

Except the single case recorded, there was at no time any case outside of the school and no known possibility of its introduction into the school. There had, however, occurred in the same building the preceeding year a dozen or more cases of the mild form described above (not diagnosed erysipelas by my predecessor), and doubtless the baccilli of Fehleisen maintained winter quarters in the building. Several of the same patients had sufferod the year before. The young white man was probably innoculated by me in dressing his wound. If so, the incubation was exactly ten and one-half days.

Such mild cases as I have reported often puzzle sur-

geons. Drs. Grindon and Fry in a discussion before the St. Louis Medico-Chirurgical Society recognized this difficulty and report as an "erythematous affection" cases quite similar to the above.—(*Courier Medicine*, Dec. '87.)

REPORT ON PROGRESS.

DERMATOLOGY.

BY JOSEPH GRINDON, M. D., ST. LOUIS.

I. The Etiology of Leprosy.
II. "Dead Fingers" in Syphilitics.
III. Remedies for Venereal Sores.
IV. Modern Treatment of Lupus.
V. Sapo-lanolin.
VI. Squamous Eczema of the Back of the Hand.

The Etiology of Leprosy.

Dr. P. S. Abraham, in the *Jour. of the Am. Med. Ass'n*, says that observers have considered this to consist in, first, heredity; second, a fish diet; third, contagion. He summarily dismisses the claims of the first-mentioned cause, adducing among other facts, the comforting intelligence communicated by Dr. Hansen who came to this country to learn what became of lepers coming here from Norway. We quote:

"He was able to find out that about 160 Norwegian lepers had been established in Wisconsin, Minnesota and Dakota. Many of them have married and some have left a good many descendants. There are in addition a good many Norwegian immigrants who are either descended from lepers or have leprous relations living in Norway. There is, therefore, in those districts considerable material for the inheritance of leprosy. Of the 160 leper immigrants only 13 are left, whom he himself saw, and besides these there are perhaps 3 or 4 others. All the rest are dead. Of all their descendants whom he has seen, as far as the great-grandchildren, not one has become a leper."

The laboriousness of such an investigation and the devotion to science which carried it on, are only equalled by the importance of the results. We must at least admit that leprosy is not of *necessity* hereditary.

The second or fish theory is regarded as obsolete by all observers of note with the exception of Jonathan Hutchinson, who holds to it and rejects the third theory, that of

Contagion. The arguments in disfavor of the latter remind one of those used by the prisoner who complained of the injustice of convicting him on the evidence of some paltry half dozen witnesses, when he could bring forward a hundred who would swear that they had not seen him commit the offense. In other words, they are of a negative sort, and although not valueless, necessarily share in the proverbial weakness of all such pleadings. Nevertheless the st e n of Dr. Danielsen, that "in all his long experience with the disease, he had never met with one single instance of contagion" must needs carry with it some weight. On the other hand, we have a long array of names committed to an affirmative answer from Norway, the Sandwich Islands, Jamaica and other West Indian Islands, South America, Russia, France and various points in this country. Dr. Blanc, of New Orleans, says, "that leprosy may be communicated from a leprous to a non-leprous person by means of a specific virus which acts like the specific poison of syphilis, depending upon thin or denuded surfaces for its absorption, and which remains potent, very probably, for an indefinite period of time."

The celebrated report of the Royal College of Physicians in 1867 which denied, in unequivocal language, the contagiousness of leprosy, only proves that no scientific body holds the monopoly of wisdom.

Apropos of this subject, we may quote some facts given by Dr. P. A. Morrow, in an interesting report on some observations on this disease made by him in Mexico and the Sandwich Islands, which appeared in the *N. Y. Med. Jour.* for July 27. He traces the leprosy in this country to four distinct causes. In Louisiana it was introduced by the Acadians, in the northwest by Scandinavians, along the Pacific coast by the Chinese, and along the Southern Atlantic coast it was brought from the West Indies. Besides these, another colony was imported by the Mormons from the Sandwich Islands in the persons of native Kanaka women.

Dr. Morrow formulates his creed as to the etiology of leprosy with no uncertain voice: "Leprosy has an exclusive origin; it is invariably derived from the lesions or excretions of a person similarly diseased. * * * Its origin and spread can always be traced to human contact." He reminds us, however, that in 1885 the French Academy of Medicine arrived at a conclusion similar to that of the Royal College, above referred to, with but three dissenting voices. In 1888, however, when the subject was again broached in the same assembly, the partisans of contagion were much more numerous.

Some of the parallelisms existing between leprosy and syphilis are found in the following statements of Dr. Morrow. "It is probable that in the immense majority of cases the disease is propagated through sexual intercourse. This mode of infection is rendered almost certain by the observed fact that healthy individuals having sexual relations with lepers almost invariably become contaminated." And again, "vaccination is believed by the natives, as well as by many intelligent physicians, to be a potent agency in the rapid diffusion of leprosy through the islands. It must be remembered that until recently vaccination was performed by unskillful hands, human virus was used, and no distinction was made between a healthy person and a leper as a vacciniser. The fact is incontestable that after the general vaccination of the natives, numerous leprous centres developed in various parts of the islands where

the disease had previously been unknown. Orning demonstrated the plentiful presence of bacilli in the lymph and crusts of vaccine pustules in lepers."

Dr. Morrow makes the welcome statement that "lepers are almost always sterile." Less pleasant to read is his opinion that "unquestionably leprosy is slowly gaining ground in this country," which he reenforces by instancing two recent reports, one of 42 cases at New Orleans, and another of 100 cases at Key West. These facts are sufficiently alarming, although the general healthfulness of the country will probably never permit our sinking to the sanitary level of India, with its 250,000 lepers.

It is gratifying to learn from Dr. Andrew Shields, in the *Australian Med. Jour.*, that a new land from which civilization and the race have much to hope, and which might *a priori* be supposed to offer a fruitful field for the ravages of this disease has hitherto been fairly successful in keeping it under control. Thus in New South Wales there are 10 Chinese lepers, 1 European and 1 Malay; in Victoria 5 Chinese, and in South Australia "a few" Chinese. The other divisions of the Island not being referred to are presumably free from the disease. All but two, it will be seen, are Chinese, and there is but one white patient.

From South Africa comes the report, by Dr. Daubler, in the *Vonatsheft f. Pract. Derm.*, that leprosy is spreading from Cape Colony into the centre of Africa. Here again the disease was first brought by the Chinese. These facts have a practical value for us in America, in pointing out the sources of danger.

"Dead Fingers" in Syphilitics.

Dr. H. G. Klotz, in the *Am. Jour. of the Ved. Sci.* for August, 1889, describes a syphilitic in whom certain fingers of both hands presented a livid, mottled color, coldness and other symptoms similar to those of Raynaud's disease or "dead fingers." There were also ulcers on other parts of the body and a pustular eruption. Under "mixed treatment" the peculiar conditions disappeared, together with the general symptoms.

He also quotes a case of Hutchinson's in which, in the fourth year of the diathesis there appeared coldness, pain and lividity of the fingers of the left hand except the thumb. On the ring finger was a sore resembling those which sometimes accompany the section of nerve trunks. There was 10° difference between corresponding parts of fingers of the two hands. Under specific treatment at the end of six months the pain had ceased. The temperature of the ring fingers of the two hands was the same.

Both Klotz and Hutchinson are of the opinion that the pathological condition in these cases was syphilitic arteritis. True "periphereal asphyxia," Raynaud's disease, on the other hand, is by common consent regarded as a vaso-motor neurosis.

Dr. Klotz also brings forth evidence to show that there exists an ascending syphilitic infiltration of small arteries which may produce peripherally ulcers and gangrene.

The presence of "dead fingers" in a syphilitic has been observed at the clinic of the St. Louis Medical College in the service of Dr. F. R. Fry.

Remedies for Venereal Sores.

Schurmmer advises the following:

Salol as a substitute for iodoform in venereal sores, mixed with starch in the proportion of 2 to 1.

Oxynaphthoric acid in scabies, with chalk and soft soap, each 10 parts, lard 70 parts.

Antherarobin with collodion 1 to 10, in tinea tonsurans, eczema marginatum and pityriasis versicolor.

Modern Treatment of Lupus.

Modern views as to the etiology and pathology of lupus are well exemplified by the treatment recommended by Profs. Pick and Doutrelepont at the Prague meeting of the German Dermatological Society last June, it being directed to the destruction of the recognized efficient cause, the tubercle bacillus, and to the prevention of its further dissemination in the organism. Thus Doutrelepont curettes very deeply, and "from fear of a miliary tuberculosis" follows this with the application of Paquelin's cautery. If after the application of corrosive sublimate and the removal of the crust, there are still granulations presenting a bad appearance, he uses pyrogallic acid, which he replaces two or three days later by corrosive sublimate applications, and then continues this treatment, using alternately one or the other remedy until the obtained cicatrix becomes a perfect one.

Pick advises immediate removal when the lupus is primary, but when it is secondary to general tubercular infections, one can not hope to do much good. He prefers ablation to scraping out, for after the latter operation he has seen several cases go into miliary tuberculosis with a rapidly fatal termination. He does not use sublimate after cauterization, but allows the crusts to fall off of themselves, after which the surface is dressed with balsam Peru.

Sapo-lanolin.

Stern, of Manheim, under the name of "sapo-lanolin," recommends a mixture of two parts of green soap, with two and a half of lanolin. With this he incorporates all the ordinary medicaments except salicylic acid. He has found it specially valuable in the treatment of infiltrated eczema, parasitic diseases and seborrhœa with thick crusts. With the addition of 10% of white precipitate it renders excellent service in psoriasis capitis, usually clearing up the disease in from 3 to 8 days' time, and needing only the application of an indifferent ointment to complete the cure. He calls "lanolin wax paste" a preparation of 40 parts each of yellow wax

and lanolin and 20 parts olive oil, melted together and shaken while cooling. It can be spread upon the skin, where it sticks, thus making an excellent base for fixed applications. When the medicament to be carried is tar, more wax should be used. It is useful in facial eczema with zinc oxide or boric acid. The following is highly lauded in vesicular or squamous eczema:

Salicylic acid, 3 parts, olive oil, 17 parts, lanolin and yellow wax each 40 parts.

Squamous Eczema of the Back of the Hand.

Unna, in the *Monatsheft f. Pract. Derm.*, recommends the following in squamous eczema of the back of the hand: Resorcin, glycerine, of each 10 parts, dilute alcohol, 180 parts. This is to be diluted with an equal bulk of water when used, and applied soaked into a thin layer of cotton batting, to be applied in the evening. Over this is to be bound a large piece of gutta percha tissue. In the morning a zinc oxide paste either with or without sulphur, tar, or resorcin is to be applied and renewed once or twice during the day.

TRANSLATIONS.

HEREDITARY SYPHILIS.

Series of Lectures delivered at l'Hopital Saint Louis by Professor Fournier. Translated by Dr. Benno von Steinmetz.

Lecture V.

Gentlemen.—In my last lecture I spoke to you of the conditions which can modify heriditary syphilis. I told you all that we know on the subject. Science, however, in not complete in this respect, and there must be other conditions, because these are cases of hereditary syphilis, which are not explained by those which we know. To-day I begin another part of my programme; I wish to indicate to you that of which we are ignorant, and right here we meet with five important facts:

1. There is a series of exceptions to the best established laws—a. As to the law of attenuation by time, by which the first born are the most intensely afflicted, and the last born the least. There are cases in which this law is reversed. Example: I have seen a young man, who contracted syphilis in 1882, married in 1884, to a healthy woman, whose first child by him was born sound, and the second syphilitic, dying shortly after birth. Dr. Pinard has observed three analogous cases, which are reported in the Dr. Rivcreux's thesis; among others the following: A young man contracted syphilis in 1872 and married in 1878. His wife, who remained healthy, gave birth to four children; the three first were born healthy, but the fourth was born syphilitic and died.

There is a wide-spread belief among the the laity as well as among the physicians, that, if in a family tainted by syphilis, a healthy child is born, there is no more infection to be feared; that child is looked upon as a certificate of liberation. This opinion is erroneous; not only manifestations of the disease show themselves on the parents after such a child is born, but also the later born children may inherit the disease. Syphilis in these cases is rare, but it has been encountered.

b. As to the law of attenuation by treatment. There are cases (happily they are few) in which treatment does not seem to influence hereditary syphilis. I am acquainted with three patients who have been continuously treated from two to three years, and who have nevertheless engendered syphilitic children. Dr. Robin has communicated to me a case of this kind which he was able to follow from the initial sore. One of his friends having contracted syphilis was treated by him from the beginning by from 0.03 to 0.06 Gm. ($\frac{1}{2}$ to 1 grain) of sublimate per day for three years; no symptoms showing themselves, he was allowed to marry at the end of this time; his wife conceived and at the end of the fourth month of her pregnancy, showed symptoms of syphilis by conception. She gave birth to a syphilitic child at term, which died shortly after birth.

c. As to the combined action of time and treatment. I will cite to you two cases from my own practice. A robust young man was infected by syphilis in 1875. I can assure you that he followed my directions to the letter. Between 1875 and 1888 he passed through seven mercurial and four iodine treatments. I allowed him to marry after 4 years of constant treatment. His wife gave birth to a syphilitic child, which was recognized as such by Dr. Parrot, Pinard and by myself.

A young man contracted syphilis in 1867. He was treated for three years by Dr. Ricord and then by another physician. After seven years of treatment, he married and four months later his wife showed signs of syphilis by conception; a syphilitic child was born, who at the age of twelve years showed signs of the disease.

These cases would be dicouraging if they were not exceptional. But why this derogation of the established law exists, we do not know.

II. Existence of Inequality.—Hereditary syphilis is lenient in some, to the point of being inoffensive; in others it is malignant and pernicious. It is said that equality does not exist in nature, that it is only seen on the *facade* of monuments. This is no explanation of the phenomenon, and I am often surprised to see children who are killed even before their birth, while others are not affected at all. There are contrasts of inequality and contrasts of the opposite. To explain:

We see men effected with syphilis who have been treated for a short time only, get married, and have healthy children. A young man had a chancre in 1873; I treated him for three months and another physician during four months. He married in 1875 and now has three healthy children. And this case is not rare. Does not this show a contrast of inequality with the preceding cases?

Along side of this there are contrasts of opposite which are at the antipodes of one another. We have here

apparently privileged persons who have healthy children shortly after their infection with syphilis and who have received but little treatment. Thus a young man who had taken only 45 pills in all, had, four years after contracting syphilis, three healthy children.

A physician who treated himself only three months, had four healthy children at the end of the third year of his syphilis.

Another, who had taken only 120 pills in all, had a healthy child at the end of the first, and another healthy child in the course of the third year after contracting syphilis; this last man, recently presented himself for the treatment of a gumma.

On the other hand, there are patients who are persecuted by heredity with unrelenting fury. A healthy woman was impregnated by her syphilitic husband six times in succession, which pregnancies terminated as follows: The two first ended in abortion, the following two by dead born children, and the two last by the birth of syphilitic children. Another woman had ten pregnancies nine of which terminated in abortion and the tenth in the birth of a syphilitic child; this last pregnancy appeared sixteen years after the initial sore of the husband. Ribemont has reported a series of nineteen pregnancies, without the production of a single living child.

Why are there such inconsistencies? I don't know, and it is inexplicable to me.

III. An Uncured Syphilitic Subject May Have Healthy Children.—It is frequently observed that a healthy child proceeds from syphilitic parents, who after its birth, present symptoms of the disease. This appears illogical; it seems that cure must exist, yes or no, with its consequences.

Concerning the father, examples of this anomaly are abundant.

One of my friends, a physician, contracted syphilis seventeen or eighteen years ago; after treating himself for a short time he married, and is father of four healthy children. One year after the birth of his second child he consulted me for a syphilitic ulceration of the palm of his hand.

Concerning the mother, examples are more rare; I have, however, five different cases in my notes.

A syphilitic woman had one healthy child; two years later she applied to me for the treatment of a gumma on her forehead. Another mother presented an exostosis two months after the birth of healthy twins. A syphilitic couple gave birth to a girl who up to the age of 17 years showed no symptoms of the disease; eleven months after the birth of the girl, the mother showed signs of syphilis, and ten years later tertiary symptoms appeared in her. A syphilitic mother had a healthy child by an unknown man; nine months later she presented an ulcerative syphilide of the pharynx and other syphilitic manifestations. In another case tertiary symptoms showed themselves four years after the birth of a healthy child.

How is the indifference of the diathesis explained? Especially in those cases, where the parent is under full sway of secondary symptoms at the moment of fecundation, and nevertheless the child is born healthy? I do not know how to explain it; it is a veritable mystery to me.

IV. Alternation of Healthy and Diseased Children in the Same Family has been Observed.—We have seen in a previous lecture that heredity may be manifested in a series of pregnancies, or it may gradually diminish in intensity and at last die out altogether; but it is surprising to see a healthy child born in a family, between the oldest and the youngest children, both of whom are syphilitic. Example: A syphilitic young man married, and his wife became syphilitic by conception. Five successive pregnancies terminated as follows: the first by a still-born child; the second by a healthy child, which Dr. Barthez observed to the age of eight years without finding any symptoms of the disease; the third and fourth by abortion; and the fifth by the birth of twins, both of which were tainted by the disease.

These cases are rare, but I have collected eight examples in my notes.

There are cases where the anomalies can be explained by the action of treatment; such is the case in the example reported by Dr. Thurman, which I related to you in my last lecture. Dr. Thayer has also reported a case, in which the husband only was treated. The first child was born syphilitic, the second child, under the influence of treatment, was healthy; the third was syphilitic, the treatment being suspended, under the impression that a cure had been obtained; after the birth of this third child treatment was continued, and the fourth was again sound.

But if treatment does not intervene, how are these cases explained? Hypotheses on the subject have not failed to appear:

1. This type of syphilis has been compared with a volcano which has its period of eruption and activity, which are succeeded by periods of calm and quietness. This explanation would be satisfactory, if it were not demonstrated that acute syphilitic manifestations are not necessary at the moment of fecundation, for the production of hereditary syphilis.

2. The theory of revivification of the syphilitic virus by perturbation or any excitation whatever, pregnancy for instance. The virus, according to Hutchinson, exists sometimes in the seminal fluid, and sometimes is not found in it. This may be possible, but it is only a theory, which is incapable of proof. It is better to simply avow our ignorance on the subject.

V. Twins.—In twin pregnancies, the heredity may act very unequally, exercising its influence upon one of the twins and not upon the other. These cases, however, are not numerous. Sometimes there is only a difference in the intensity of the disease, one of the children being gravely affected and dying, whereas the other has but few signs of the heredity. Hutchinson has observed several cases. In the case cited above, of twins in the fifth pregnancy, the one presented manifestations of papular syphilides and exostoses and died

shortly after birth, while the other showed but few symptoms. These cases are peculiar but not extraordinary, because twins are often unequally developed. What we find strange is to see in twins the one afflicted with hereditary syphilis, and the other healthy. Diday has reported a case of this kind. The father was syphilitic, the mother was healthy; twins were born, of which the boy was syphilitic (pustulo squamous syphilide) and died two weeks after birth; the other was a girl who never showed the least indication of the disease, and who, at the age of twelve years was perfectly healthy, as well as her mother. Another case has been observed by Kassowitz. In explanation of these cases, the theory of partial infection has been brought forward, of healthy and diseased spermatozoa in the same semen. This theory cannot be satisfactorily demonstrated, and we are compelled to say that we do not know the reason.

Conclusion—An absolute reserve is imposed in respect to giving an opinion as to the consequences of hereditary syphilis. There are evidently cases where we can foretell the result with quasi-certainty. To a father, whose syphilis is ancient, well treated, and who has had no symptoms of the disease for a long time, we can promise a healthy child; for a woman, whose syphilis is recent, not treated, and who has yet manifest signs of the disease, we prognosticate a still-born child or a child infected with the heredity; and we will not be at fault once in a hundred cases. There are exceptions, but they are rare.

In cases of pregnancy following a series of happily terminated former pregnancies, the prognosis is favorable, but in cases where former pregnancies terminated in abortion or still-born children, it is unfavorable. In many cases, the solution of the problem will be uncertain or even impossible, and the mishaps frequent. In those cases, where everything is intermediate, age of the disease, treatment, intensity, we must maintain an absolute reserve, because in these cases everything is possible.

Salt in Milk for Children.—Dr. A. Jacobi (*Arch. of P d*), says that the addition of sodium choloride prevents the solid coagulation of milk by either rennet or gastric juice. The cow's milk ought never to be given without table salt, and the latter ought to be added to woman's milk when it behaves like cow's milk in regard to solid curdling and consequent indigestibility. Habitual constipation of children is influenced beneficially, since not only is the food made more digestible, but the alimentary secretions, both serous and glandular, are made more effective by its presence.—*Am. Pract. & News.*

To Allay the Thirst of Diabetes.—Dr. Duchesne recommends: Patass. phosphate, 1 dram; aqua, 5 ounces. M. Sig: Two to four drams several times a day.—*Am. Pract. & News.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,
Editor.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

Communications relating to subscriptions and advertisements should be addressed to J. H. Chambers, 914 Locust Street, St. Louis.

Original Articles, Reports of Cases, Correspondence, etc., relating to interesting medical topics, are cordially invited.

Twenty-five extra copies will be furnished free to the author of each original article.

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Contributors desiring reprints can obtain them on favorable terms by applying to the publisher immediately after their articles have been accepted for publication.

Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, SEPTEMBER 21, 1889.

Fifteenth Annual Meeting of the Mississippi Valley Medical Association.

One fact which stands out with self-assertive prominence regarding the late meeting, is that it was a pronounced success, scientifically, socially and numerically. In fact it was *such* a success in the matter of material on hand, that many who had come prepared to read papers were compelled to return with them unread because of the lack of time in the three days to dispose of the superabundance of material provided.

As to the quality and character of the papers presented, the registration list, (given on another page), showing their authors, speaks in emphatic praise. Men whose names are ever associated with progressive medical literature were to be seen in gratifying members. New York, Pennsylvania, Maryland, Connecticut and other extra-Mississippi Valley states seemed to have appreciated the necessity of putting forth their best efforts in the matter of representation. The presence of the President of the Association of Railway Surgeons, the Vice President of the American Medical Association and many officers of state societies gave further evidence of the high standard of the workers assembled. Amongst the medical journals represented, may be mentioned the *New York Medical Record*, *Journal of the American Medical Association*, *American Practitioner and News*, Chicago *Medical Standard*, New England *Medical Monthly*, Cincinnati *Lancet-Clinic*, Kansas City *Medical Record*, Philadelphia *Times and Register*, St. Louis *Medical and Surgical Journal*, St. Louis *Advance* and the Weekly Medical Review.

In order to provide for the more rapid reading of the great number of papers promised, the Committee of Arrangements had divided the programme into medical and surgical halves, expecting that the association

would divide into these sections; this plan was not adopted, however, and the medical and surgical papers were read alternately. Discussions were freer than is usual. These various factors rendered it impossible to go through the programme as mapped out.

In future, provision will have to be made for avoiding such a predicament, either by limiting the number of papers, increasing the length of session, or dividing the association into sections. There are manifest objections to all of these plans, so it remains for the wise heads to solve the problem.

The exhibitors were rather crowded in the two rooms alotted them, but a good showing was made nevertheless. The main hall, though not as elaborately decorated as our Pickwick auditorium, was more commodious, and quite equal to the occasion.

The social features of the meeting were thoroughly enjoyable. The all-pervading and benignant spirit of the genial chairman of the Committee of Arrangements, Dr. A. M. Owen laid its impress on every guest; all felt at home and were happy. The excursion to Garvin Park and banquet *al fresco* were delightfully unique. The toasts, though at times longer than the code allows, were on the whole entertaining. The question of the location for the World's Fair furnished a bountiful source for the display of wit and repartee by the partisans of Chicago and St. Louis. The restraining influence exercised by the presence of the ladies was a fortunate thing for Chicago; otherwise she might have been represented *under* the table instead of on it.

After Mayor Goodlet had welcomed the assembly in an eloquent address, toasts were responded to as follows, Dr. I. N. Love presiding: "Our Guests," by Dr. B. B. Kumler; "The Citizen Abroad," Dr. W. C. Wile; "Looking Backward," Dr. C. R. Early; "Yesterday and To-morrow," Mr. J. G. Shanklin; "The Mistakes of Doctors," Dr. J. M. Matthews; "The Young Doctor," Dr. Dan. Thompson; "The Future of Medicine," Dr. W. H. Wathen; "The City of St. Louis," Dr. L. Bauer; "Medicine, South and West," Dr. Jno. H. Rauch; "Baltimore," Dr. Geo. H. Rohé; "American Medical Association," Dr. Hollister (for Dr. Jno. W. Jackson, who was ill); National Association of Railway Surgeons," Dr. J. B. Murdoch; "The Queen City," Dr. E. S. McKee; "The City of the Kaw," Dr. E. R. Lewis; "Chicago," Dr. G. Frank Lydston; "The Babies," Dr. J. A. Larrabee; "The U. S. Marine Hospital Service," Dr. W. H. Long. Dr. A. M. Owen was held responsible for the four toasts, "Mississippi Valley Medical Association," "More Light," "Evansville" and "The Committee of Arrangements."

The surprisingly excellent musical talent of Evansville was shownto advantage in the concert given on Wednesday evening.

The resignation of Dr. R. L. Thomson as permanent Secretary, was regretfully accepted by the Association. A unanimous vote of thanks, together with remarks by several speakers, gave token of the high appreciation in in which Dr. Thomson was held by the members of the Association.

The Committee on Elections is to be congratulated on its choice of officers for the ensuing year: President, Dr. J. M. Matthews, Louisville; First Vice-President, Dr. C. R. Early, Ridgway, Pa.; Second Vice-President, Dr. T. B. Harvey, Indianapolis; Secretary, Dr. E. S. McKee, Cincinnati; Treasurer, Dr. C. McGahan, Chattanooga, Tenn.; Chairman of the Committee of Arrangements, Dr. I. N. Bloom, Louisville.

Louisville was determined on as the place for holding the next meeting.

The Powers and Duties of Medical Boards.

IMPORTANT ADJUDICATION BY AN ENGLISH COURT OF A CASE INVOLVING PROFESSIONAL MISCONDUCT.

The general tendency manifested in the last decade toward the enactment of laws to regulate the practice of medicine in the different States has given to the decisions of the higher courts on such subjects a very general interest, both professional and public, as defining the duties and powers of bodies upon whom is devolved the administration of such laws and the selection of physicians thereto.

A decision of interest in this respect as showing the views of a foreign physician, which our own courts very generally follow, is contained in the *Lancet* of July 13, the case in point being Allbut vs. The General Council of Medical Education. The decision is by the Court of Appeals, the supreme court of judicature in England.

The Medical Council in its functions and duties corresponds very closely to the State Boards of Health in this country to which is committed the enforcement of medical practice acts.

Allbut was a duly registered physician under the laws and was therefore a legally qualified practitioner possessing all the civil and professional rights and privileges conferred by the fact of such registration.

The charge of infamous conduct in a professional respect was preferred against him before the Council, this consisting in the publication and sale by him of a handbook deemed to the detriment of public morals, and after a full hearing and trial before the Council he was found guilty as charged, and his name was ordered striken off the regester.

He appealed from this decision, was beaten in the trial court and then carried his case to the court above named, claiming that there had been no sufficient inquiry by the Council and that his name had been wrongfully and unlawfully erased from the medical register; and, further, that the Medical Council libelled him by printing and publishing in their minutes the fact that his name had been erased from the register.

As to the first complaint the court promptly decided that the Council was under the law the sole judge of what constituted "infamous conduct in any professional respect;" that a medical practitioner accused of such behavior is to be judged by the Council and not by the

courts, the former clearly having jurisdiction to enter on the inquiry, and, having that jurisdiction, are constituted by the legislature the *sole* judges as to whether the complaint is substantiated—this conclusion being in line with a decision in a similar case made in 1863.

In regard to the alleged libel, the defense of the Medical Council was that the matter was published *bona fide* and without malice and in circumstances which made such publication privileged.

It was expressly admitted by the plaintiff that the report was truthful, accurate and honest, stating only facts that had been finally ascertained and adjudicated upon.

The matter was carefully considered by the court and decided as stated by the *Lancet* " on the recognized principles, in similar cases, that the personal inconvenience of the publication of the proceedings of a body charged, like the Medical Council, with the duty of deciding questions of conduct is not to be set against the public advantage of such publications. The public have a right to know who are registered and who are not; and, in the case of erasure, to know the reasons for erasure."

A German Code of Ethics.

We do not know whether any country except the United States possesses a written code of ethics; the necessity for such rules of guidance is sufficiently apparent, although the probability is, even were they not in existence, the majority of physicians would still meet each other in a spirit of concession and mutual fair-dealing, with a tendency to smooth over the little points of difference occasionally arising.

We learn from the *Medical Record* that the German physicians have also adopted a code of ethics. On June 24 the Seventeenth Congress of German Physicians met at Brunswick and passed the following resolutions:

1. Every kind of public laudation, whether it proceeds from the physician in question himself or from others, and continued advertising in public papers are to be reprobated.

2. The designation "specialist," for puffing purposes is to be reprobated.

3. The public offering of medical assistance gratis, underbidding in concluding contracts in sick societies and the like, offering advantages of any kind to a third person in order to procure practice, are inadmissible. The designation "Klinik" and "Poliklinik" (hospital) belong exclusively to institution which serve the purpose of instructions in connection with universities.

4. The ordering and recommending of secret remedies are inadmissible.

5. Any attempt of any kind on the part of a physician to intrude upon the practice of another is dishonorable, especially in the case of one who has acted as substitute or in consultation. A practitioner must by no means undertake the treatment of the case without the express consent of the previous physician. A specialist called in for a definite part of the treatment must strictly confine himself to that.

6. No physician is at liberty to make disparaging remarks to others about another physician.

MEDICAL ITEMS.

The 'Foghorn' was there in all its generous rotundity.

Dr. J. W. Lanius is traveling in the interest of the Review; we bespeak for him the kind consideration of our friends.

Chicago has our heartfelt sympathy for the suddenness and hardness with which she was compelled to take a back seat.

Dr. A. M. Owen was presented with an elegant punch-bowl in recognition of his tireless services for the entertainment of the guests.

A correspondent of the Indianapolis *Journal*, Sept. 13, writing over the signature of A. W. B. gives a very interesting account of the Association meeting.

Dr. Bray, one of the oldest of American surgeons, served to counterbalance the generally youthful appearance presented by the ex-Presidents on the platform.

Poisoned by Cheese.—Fifteen threshers were poisoned a few days ago near Tiffin, O., by eating cheese. All were taken ill, and it is feared some of them will die.

The Salvation Army.—Heretofore no close connection has been noticed between medical conventions and the Salvation Army; hence the surprise was the greater when the carol of the Army was heard at Evansville in wee sma' hours.

Died For Want of Medicine.—Such was the inscription placed on a death certificate by a physician at Hudson, Mass. He had prescribed for whisky, but because of the blue laws in vogue, the drugstores were closed and none was obtainable.

Puns, according to the Weekly Medical Reaiew are a necessary complication of abdominal surgery in St. Louis. The patient has a "pained and anxious expression" as a result. Even a St. Louis canine, recently operated on by Drs. Dalton and N. B. Carson, had this expression "clearly depicted on his classic features." What local microbe is responsible for St. Louis puns, and where is the "microbe-killer?"—Chicago *Medical Standard.*

The pained and anxious expression of the dog undergoing the torture of being compelled to listen to surgical puns will not be a circumstance to that presented by the

average Chicagoan when Congress gently but firmly informs him that St. Louis gets the Fair.

Ambiguous.—The Topeka Academy of Medicine has voted to expell any member of its body who shall hereafter meet any person outside of the "regular" profession to deliberate over the case of any particular patient, or recognize such a person as a physician in the case. The members of the Topeka Academy are exceedingly virtuous.—*Kan. City Medical Index.*

The above is a mistake, brother.—Ed. *Kansas Med. Jour.*

We would anxiously inquire which part of "the above" is referred to in the correction?

FROM THE GERMAN.

By Dr. W. C. Mardorf, St. Louis.

Tuberculosis Following Circumcision.

A number of children in Putnok, Austria, became sick 3 or 4 weeks after the performance of the religious rite of circumcision, with the customary suction of the wound by the operator. Five of the cases came to Dr. Joseph Gescheit for treatment, and in all of the patients he found tuberculosis of various organs with, in addition, local tuberculosis of the penis. An examination of the operator who performed the circumcisions revealed advanced tuberculosis of the lungs and larynx. —*Internat. klin. Rundsch.*

A Danger in the Toilet of the Peritoneum.

Dr. Polaillon, in *Le Practicien*, calls attention to several dangers to be guarded against in washing out the peritoneal cavity with warm water, the most common of which is cessation of breathing; this comes on when the water begins to flow into the cavity. In one case which Polaillon saw, death ensued instantaneously, and in two others respiration was with difficulty restored. This accident is to be ascribed to a shock to the solar plexus, and should be guarded against by first, raising the shoulders in making a toilet of the peritoneum, so that the fluid may gravitate to the lower part of the abdominal cavity and into the pelvis; second, taking care that the temperature of the water is not in excess of the body heat; and third, if chloroform anæsthesia is being employed, especial care should be taken in its administration while irrigation of the cavity is going on. —*Deutsch. Med Zeit.*

An Antiseptic Paste.

Dr. Socin, in *Sem. Med.*, recommends a paste for dressing small wounds where the ordinary surgical dressing cannot well be employed. It is composed of equal parts of zinc oxide and water, with 5 % of zinc chloride, thoroughly mixed. It is better to prepare this paste just before using, in order that it may be as fresh as possible. The manner of using it is as follows: After a harelip operation, for instance, when the sutures have been applied and the parts carefully cleansed with an antiseptic solution and dried, the requisite quantity of paste is applied to the wound and its immediate neighborhood with a spatula; the paste dries in a few minutes, during which time small bits of cotton are incorporated with it for the sake of firmness. The result is a firm crust, impermeable to air and fluids. This may be cautiously removed after 4 or 5 days, in order to take out the sutures, after which it is freshly applied and left in place until it falls off, which usually happens in 5 or 6 days, when the wound is found to be united. The paste is non-irritating, and does not cause eczema, even after continued applications.—*Deutsch. Med. Zeit.*

A Substitute for Plaster Bandages.

Drs. H. Jonas, of Dresden, and M. Radeschinsky, of Vienna, have proposed a substitute for the heavy and inconvenient plaster-of Paris bandage. Coarsely woven textures of yarn or hair, also pasteboard, heavy paper, etc., are soaked in a solution of resin and borax in alcohol, and allowed to dry. When required for use pieces of the desired shape and size are cut out and gently warmed in warm water, warm air, or before a fire, when they become soft and yielding, and are readily adapted to the parts to be supported. The splint cools in a few minutes and becomes firm and rigid, forming an unyielding support for the limb.—*Deutsch. Med. Zeit.*

Late Methods of Treating Laryngeal Tuberculosis.

Dr. Krause, of Berlin, is one of the most enthusiastic adherents of the plan of energetic local treatment in cases of tuberculosis of the larynx. At first advocating and employing the free use of lactic acid in such cases, he has since combined with this treatment the use of the curette, and he claims this combination of methods of treatment is followed by excellent results. With a spoon especially devised by him for this purpose, he curettes the ulcers and granulations with the expectation of thus causing a simple ulcer; he also excises portions of the infiltrated tissues, thereby rendering them more accessible to the lactic acid. Thus far he has a record of 71 cases treated in this manner, of whom 43 were cured or improved. Of this number 23 are still alive (and presumably well), 7 are dead, but not as a result of the tuberculosis, 8 declined a continuance of the treatment, and 12 are still in his charge.

It must not be concealed, however, that this method in the hands of other observers has not yielded as encouraging results as the above. From our present standpoint, which sees surgical methods stepping forward in the treatment of a constantly increasing number of diseases, we are apt to sympathize with the au-

thor in his endeavors, but more extensive statistics are required before we can venture to call this *the* treatment for laryngeal phthisis.—*Ther. Vonatsheft., Deutsch. Med. Zeit.*

Syphilis in the Etiology of Tabes Dorsalis.

We take the following from an interesting paper on the relationship of syphilis to tabes, by Dr. E. Schwarz, in the *St. Petersburg Med. Wochensch.* During the last decade a vast amount of care and labor has been devoted to ascertaining the extent to which syphilis figures in the etiology of tabes dorsalis, and this question is still far from being decided. The earliest percentages of cases of tabes with an antecedent history of syphilis is much smaller than in the later statistics, and this is doubtless due to the fact that the interest in the question at issue has been constantly increasing, and the histories of patients have been more closely looked into. Thus Erb at first found syphilis in 50% of his cases of tabes, but later 89%; Fournier at first found 70%, later, 91%; Bernhard at first, 21%, and later, 60%; Westphal never found more than 14%. Thus the difference between the two extremes, 14% and 91% is considerable. It would not be assuming too much to state that the earlier figures were gathered at a time when but little importance was attached to a relationship between the two diseases, and that the enormous figures of 89% and 91% are due to a realization of the importance of the question, and consequent closer investigation. In this connection, stress must be laid on the difficulty and ofttimes impossibility of getting a clear history of syphilis in every case of the disease. In the first place, tabes is a late result of syphilis, generally following 6 to 15 years after inoculation. Cases in which syphilis affects the nervous system are very apt to have been mild in their previous course, so that the disease may not have been treated properly, or often not even noticed. Of the 30 cases of tabes which have come under the author's personal observation he has not found a single one undoubtedly free from syphilis. In several of the cases syphilis could not be clearly proven, but only strongly suspected; the latter cases cannot of course be put down as syphilis. Therefore when he states that 60% of his cases were affected with syphilis, it does not mean that 60% only were syphilitic, for who can assert that the remaining 40% were *not* syphilitic? He then cites the case of a tabetic patient belonging to the latter class, whose wife had given birth to two stillborn children; a manifest improvement in his condition with the birth of a living, healthy child followed the inunction treatment.

Two arguments are chiefly advanced against syphilis as an etiological factor in tabes:

1. Syphilis does not cause systemic degenerations.
2. Tabes is not affected in the least by antisyphilitic treatment, whereas if tabes were of syphilitic origin, mercury and the iodide should effect a cure, or at least an improvement. Late investigations by Rampf and Kraus show that the changes in the blood-vessels and connective tissue of the spinal cord in tabes, causing compression and degeneration of the posterior columns, are very similar to other syphilitic processes. Why syphilis should attack certain systems of fibres in preference to others we do not know and cannot explain; we have analogies in the anterior poliomyelitis of lead poisoning, the spastic spinal paralysis and the tabes of diphtheria and ergot, and it is equally as difficult to explain the systemic preferences of these poisons.

As regards the second objection, we must regard the effects of treatment in tabes just as we do in those other secondary processes, which are also indirectly the result of syphilis, but are not themselves siphilitic in nature. As we cannot demand that a hemiplegia brought about by the rupture of a syphilitic vessel, shall disappear as the result of specific treatment, so we cannot ask that a degeneration of the posterior columns, caused by a strangulation from syphilitic infiltrations shall be made to vanish by the use of mercury and potassium iodide. In the face of this, however, the author has seen cases of advanced tabes, that were steadily growing worse, come to a standstill for many years after the use of mercury. The lesson to be drawn from this is that specific treatment should be instituted as soon as possible, if there is even a suspicion of lues.

Indeed, we find in some advanced cases that the inunction treatment is not only of no benefit, but even harmful; this fact must be allowed to militate against the syphilitic origin of tabes, since pathological anatomy has taught us that some unquestionably syphilitic affections resist the most energetic treatment, and has given very simple explanations therefor. Another explanation is found in the fact that in posterior spinal sclerosis the vegetative functions suffer; the functions of the stomach, the intestines, the bladder are all impaired; nutrition is lessened; tabetics are very sensitive to slight changes in their general condition. Slight changes in the weather cause pains, decrease their powers of walking; slight over exertions throw them back for months in any results of treatment which may have been attained. A few baths of too high a temperature may increase their sufferings; the inunction treatment may do the same by causing too great demands for tissue conversion. Rampf states that the inunction cure will succeed, even in advanced cases, if attention be paid to the patient's assimilative powers and general condition. Rampf proposes painting the back and legs with a faradic brush during the inunction treatment, and instead of 1 or 2% of patients benefited, as former statistics show, he promises 20%.

In conclusion, he states that in all the cases of tabes in whom he found syphilis, the latter ran a very mild course, and the treatment was inadequate or entirely wanting, and he lays stress upon the point that milda s well as severe cases should receive energetic treatment from the outset.

SOCIETY PROCEEDINGS.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Annual Meeting held at Evansville, Ind., Sept. 10 to 12, 1889.

Dr. G. V. Woolen, of Indianapolis, read a paper on

Nasal Differentiation,

in which he arrived at the following conclusions:

1. That the nares should not be regarded as a whole in etiological factors.

2. Their correct interpretation must be with regard to their anatomical and physiological characters.

3. The region of the anterior tips of the inferior turb inated bones is the seat of hypertrophies which are the essential pathological factors of hay fever.

4. The posterior tips of the inferior, and frequently of the middle turbinates are likewise the seats of hypertrophy which are the essential pathological factors of asthma and its congeners.

5. That this is true, primarily, because the sensory apparatus of these parts is essentially distinct.

6. These products do not become factors in hay fever and asthma except there be a special dyscrasia.

7. Other repeated causes of asthma are essential pro ducts of hypertrophic disease and may have led to confusion as to cause and may possibly have been reported primarily if the hypertrophy were not removed.

8. The anterior tips of the middle turbinated bones are the seat of hypertrophic disease which produces much nerve disturbance which is attributed to other various causes.

9. By pressure of these hypertrophies on the nasal nerves we get the chief results in neuralgias in the region of the distribution of the first division of the fifth pair of cranial nerves, and by obstruction to the orifices of ducts of the interior ethmoidal cells and frontal sinuses, this is greatly intensified.

10. Thorough removal alone of these hypertrophic pro ducts is the only radical cure for these various affections.

DISCUSSION.

Dr. Wm. Porter, St. Louis.—In general, I believe that the propositions as laid down by the author are correct; but exceptions do occur. I know of several cases where the asthmatic symptoms were entirely relieved simply by the timely removal of the growth.

Dr. Dudley S. Reynolds, Louisville.—Since Dr. Porter has called attention to some clinical exceptions, I would like to mention that there are many cases of hypertrophy of the posterior tips of the turbinates in which there is no asthmatic breathing, and others with hypertrophy of the anterior tips and who have asthma and so, to say that asthma is caused in any case by hypertrophy of the posterior extemities of either bones is to propagate what I think is an error.

Dr. Lucas.—I wish to endorse the author's position.

Dr. Woolen.—Dr. Reynolds has touched the vital point in this discussion; the question is, whether he is correct or I am. This brings to our minds a thing perfectly familiar to all of us: that two men who are specialists will be as opposite in their observations and conclusions as anything can be. The trouble in this case is the magnitude of the hyperthrophy; that decides the question. It is not the size; we must look out for every vestige of the process. I remember I had one case which I thought would invalidate my theory but on further investigation I found that there was still something left after I had treated it, to cause the trouble.

Dr. B. Merill Ricketts, of Cincinnati, read a paper on

Plasto-Cosmetics in Surgery of the Face.

The demands for an umblemished appearance are certainly in proportion to the prominence of this part of the body. Not until the eighteenth century was this department of surgery developed to any great extent; since then its growth has been rapid until it has assumed the important place which it now holds.

In making a diagnosis of growths about the face, the microscope should always be used; we are never justified in making a diagnosis from the clinical appearances alone. Various means have been used in the plasto-cosmetics of the face—the curette, caustics, pastes, cautery or knife, the latter being the most rational means in the majority of cases.

In discussing this subject it is necessary to divide it into three classes, first, the removal of malignant growths; second, the correction of deformity due to traumatism; third, the removal of nævi or non-malignant growths.

Malignant growths should be removed as soon as possible, and should be done with the knife, encompassing as much tissue as can be spared.

The use of caustics in the treatment of growths about the face has been sadly neglected. After removal by this means, the coapting of the edges of the wound is all that is necessary.

In rhinoplasty, the greatest difficulty encountered is that of keeping the elevation of the nose. If a finger can be obtained, it will be of great service in this respect. It is attached to the site of the nose, allowed to adhere and grow, and it is then amputated. As to the flaps sometimes used, those taken from the forehead are most objectionable; flaps from the arm do well, but the inconvenience in securing them is great.

A naturally pug-nose may be remedied by removing a small section, lowering the end to any degree desired. Ptosis can be relieved by removing part of the eyelid, and relief should be given in all cases.

The ear has suffered greater neglect than any other organ about the face. When the entire auricle is lacking, the best thing is to replace it with an artificial ear; but when a lobule has been destroyed, it is possible to replace it with a flap from the face. Drooping of the ear or adhesions to the face should always be corrected. Moles, growths, etc., should always be eradicated, especially since we have such control over them through electrolysis. In the use of this means, a milleampere

meter should always be employed. In dissipating pigmentations, the strength of the current should be only one-half as great as that for treating warts or moles. Poultices should never be tolerated, either as a means of palliation or cure.

Dr. I. N. Bloom, Louisville.—The paper deals with a subject with which the surgeon generally concerns himself but little. In removing deformities about the face, he is generally satisfied when he has performed the opeaation, thinking little of the subsequent cicatrix. In most particulars I agree with the reader, but I differ from him in regard to the preference for the knife; many times the use of caustics will be found to leave less scarring. We can only partially control the amount of scar formation when we use a galvanometer, so I think that it is next to criminal for a man to make use of electrolysis without it. In treating a hairy mole it is sufficient simply to kill the hair and the mole will disappear of itself.

Dr. Geo. H. Rohe, Baltimore.—I agree as to the importance of the galvanometer, but I am hardly prepared to say that the man who does not use it is practicing a criminal procedure. Dr. Bloom has himself given the reason: we cannot always foretell or account for the difference in susceptibility of the skin to scar formation.

My experience with the use of electrolysis in the removal of deformities and scars has been entirely satisfactory. I have evidence to show that very large moles may be removed without leaving any scar whatever. I also think that caustics are to be preferred to the knife in many cases.

Dr. Rickets.—I also agree with regard to the use of caustics, but where we have evidence of malignancy, I think we are justified in giving the patient the benefit of the doubt.

SOCIETY NEWS.

REGISTRATION LIST OF FIFTEENTH ANNUAL MEETING OF THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

R. L. Thomson,	St. Louis, Mo.
Rich. Douglas,	Nashville, Tenn.
Geo. J. Cook,	Indianapolis, Ind.
F. D. Green,	Louisville, Ky.
T. B. Harvey,	Indianapolis, Ind.
A. M. Owen,	Evansville, Ind.
Edwin Walker,	Evansville, Ind.
I. N. Love,	St. Louis, Mo.
J. M. Matthews,	Louisville, Ky.
Dudley S. Reynolds,	"
W. H. Wathen,	"
H. H. Grant,	"
I. N. Bloom,	"
Ap. Morgan Vance,	"
A. M. Cartledge,	"
T. L. Burnett,	"
C. R. Earley,	Ridgway, Pa.
W. W. McCoy,	Jeffersonville, Ind.
Charles Knapp,	Evansville, Ind.
A. B. Shaw,	St. Louis, Mo.
Warwick M. Cowgill,	Paducah, Ky.
W. D. Fouts,	Jeffersonville, Ind.
N. Guhman,	St. Louis, Mo.
G. W. Vernon,	Indianapolis, Ind.
F. C. Woodburn,	" "
Hugo Pantzer,	" "
G. Bell,	" "
Thos. B. Rankin,	Bloomfield, Ind.
R. R. Keine,	Petersburg, Ind.
S. C. Cravens,	Bloomfield, Ind.
Algernon S. Barnes,	St. Louis, Mo.
Geo. M. Cale,	"
Allen Deulbiss,	Toledo, O.
N. M. Baskett,	Moberly, Mo.
C. F. McGahan,	Chattanooga, Tenn.
T. W. Basinger,	Oatsville, Ind.
William Porter,	St. Louis, Mo.
D. A. Thompson,	Indianapolis, Ind.
John E. Pendleton,	Hartford, Ky.
Bransford Lewis,	St. Louis, Mo.
Ludson Worsham,	Evansville, Ind.
H. C. Dalton,	St. Louis, Mo.
S. S. Watkins,	Owensboro, Ky.
J. B. Murdock,	Pittsburg, Pa.
E. Linthicum,	Evansville, Ind.
G. V. Wooler,	Indianapolis, Ind.
W. A. Hewins,	Chandler, Ind.
Chas. M. Bricken,	Tell City, Ind.
C. W. Ladd,	Cannelton, Ind.
W. W. Blair,	Princeton, Ind.
J. A. Bell,	Evansville, Ind.
E. J. Kempf,	Jasper, Ind.
T. Wartz,	" "
J. E. Johnson,	Waverly, Ky.
W. S. Pritchett,	Evansville, Ind.
J. M. Powell,	Collinsville, Ill.
J. Lucius Gray,	Chicago, Ill.
F. W. Beard,	Vincennes, Ind.
Jas. B. Hungate,	Conway Springs, Kan.
G. M. Varner,	Evansville, Ind.
J. F. Glover,	" "
Geo. Hodson,	" "
N. P. Howard,	Greenfield, Ind.
M. C. Chapman,	Toledo, Ohio.
Edwin Ricketts,	Cincinnati, Ohio.
C. P. Bacon,	Evansville, Ind.
Chas. H. Beard,	Chicago, Ill.
J. M. Shain,	Quincy, Ill.
J. C. Culbertson,	Cincinnati, Ohio.
Francis G. Early,	Ridgway, Pa.
John H. Hollister,	Chicago, Ill.
Edwin Furnock,	" "
S. C. Henderson,	St. Phillips, Ind.
M. E. Fowlkes,	Calhoun, Ky.
B. M. Begley,	Inglefield, Ind.

Joseph Eastman,	Indianapolis, Ind.
P. L. Schuyler,	Evansville, Ind.
J. P. Ward,	Union, Pike Co., Ind.
G. C. Smythe,	Greencastle, Ind.
Arch. Dixon,	Henderson, Ky.
S. E. Munford,	Princeton, Ind.
J. E. Harper,	Chicago, Ill.
W. R. McMahon,	Huntingburg, Ind.
W. H. Long,	Cincinnati, Ohio.
Louis Bauer,	St. Louis, Mo.
E. M. Powers,	" "
John Schilling,	Millstadt, Ill.
John W. Jackson,	Kansas City, Mo.
E. R. Lewis,	" "
John H. Rauch,	Springfield, Ill.
John A. Larrabee,	Louisville, Ky.
Geo. Halley,	Kansas City, Mo.
Louis D. Brose,	Evansville, Ind.
B. Merrill Ricketts,	Cincinnati, Ohio.
Victor Knapp,	Ferdinand, Ind.
C. J. Keegan,	Canal, Ind.
W. H. Meyers,	Ft. Wayne, Ind.
E. S. McKee,	Cincinnati, Ohio.
Geo. F. Beasly,	LaFayette, Ind.
Seth N. Bishop,	Chicago, Ill.
Orpheus Everts,	College Hill, Ohio.
John A. Cutter,	New York, N. Y.
Thomas Smith,	Canal, Ind.
Cutter T. Ball,	Terre Haute, Ind.
T. E. Craig,	Lawrenceburg, Ind.
Henry Gers,	Washington, Ind.
Edwin R. Lewis,	Indianapolis, Ind.
Frank C. Wilson,	Louisville, Ky.
W. V. Cook,	Corydon, Ky.
H. O. Walker,	Detroit, Mich.
A. W. Williams,	Hot Springs, Ark.
E. Fletcher Ingalls,	Chicago, Ill.
Geo. W. Ryan,	Cincinnati, Ohio.
M. W. Wishard,	Indianapolis, Ind.
J. R. Fritts,	Mexico, Mo.
J. K. Bauduy,	St. Louis, Mo.
Pinkney French,	Mexico, Mo.
W. B. Scales,	Boonidle, Ind.
D. A. DeForest,	DeForest, Ind.
Chas. W. Dodd,	Cincinnati, Ohio.
C. S. Bond,	Richmond, Ind.
J. T. Binkley,	Evansville, Ind.
W. A. Cole,	English, Ind.
J. H. Hammer,	Spring Grove, Ky.
W. B. Fletcher,	Indianapolis, Ind.
F. A. Snell,	Columbus, Ky.
J. Miliean,	Graynete, Ill.
J. S. Rodman,	Owensboro, Ky.
A. F. Steele,	Charleston, Ill.
J. J. Troutt,	Nashville, Ill.
John P. Salb,	Jasper, Ind.
H. Ohmann-Dumesnil,	St. Louis, Mo.
E. H. Luckett,	Owensboro, Ky.
G. Frank Lydston,	Chicago, Ill.
W. S. Gilmore,	Sorgo, Ky.

SELECTIONS.

ANKLE INJURY.

BY J. T. WOODS, M. D., TOLEDO, OHIO.

Ohio State Med. Soc. Trans. Condensed.

I wish to confine myself to the slightest forms, the sprain or partial rotation of the ankle, known professionally as partial luxation, and popularly as twist of the foot. In this, as in other ailments, treatment depends much on the judgment of the surgeon. Should he be present or immediately summoned, it would be wise in him to remember that all ankle sprains are both treacherous and dangerous, that the greater includes the less, and that if he pursues a course of apparently excess of care he will make the fewest possible mistakes. He will likely find partial dislocation instantaneously reduced, with pain and shock gradually disappearing. If swelling has not appeared there would not seem to be any indication for treatment, in which circumstances he will do well to so manage the matter that none may arise.

The most common-sense measure is to secure immobility of the joint. Manipulation shonld be gentle and slight in amount. Attempts at walking must be absolutely prohibited.

The slight character of the injury leads the patient to call the surgeon long after. The attempts at walking, the rude massage performed by the neighbors and the other procedures adopted before the surgeon is called, may produce an amount of swelling and inflammation, which indicates free leaching. The condition usually found will be manageable by simpler means. In every phase and stage, absolute quietude of the joint is indispensable. As long as the least swelling exists, as long as the least tenderness is found about the joint by gentle pressure, just so long is it unfit for the least use, and whatever else may be resorted to, be the period long or short, absolute immovability of the parts must be maintained. When the eye is inflamed we dare not use it; when the ankle is inflamed the same law holds as firmly. Danger of a stiff joint lies in increasing the inflammation, and delaying the recovery. Non-use until the last vestige of swelling and tenderness has disappeared, is a guarantee of the best joint condition that is attainable.

Anchylosis as a result of non-use until the period above indicated is both a myth and fraud. It does not occur. If then the inflammation is sufficient to demand leeching, let it be done, and then proceed to the use of hot water and securing joint immobility. Both these measures are to be secured at the same time, the immobility by means that will be comfortable to the patient and admit of free hot bathing. The most satisfactory means I have found is to take a piece of muslin about a yard square and fold it length-wise upon itself so as to form a pad one yard long and three inches wide.

Lay the center of this on the bottom of the foot and carry the ends along the side of the leg. These ends being drawn snugly up so as to hold the foot and ankle firmly as in a stirrup, apply over it a roller bandage making numerous figures of eight turns about the ankle, foot and leg, or in lieu of this stirrup a flannel bandage may be applied about the joint and over this the common roller. To secure firmness, the same attention must be paid to the figure of eight turns just referred to. The ankle may be covered with finely picked oakum in lieu of the flannel bandage.

Whether these last measures are resorted to or not, the stirrup pad of the first method will be found to give desired security in any case in which the reflex trembling does not occur. When this is present a splint must be placed over the whole, and this must be of a material that will withstand the use of water. Wire gauze is the best, some form of foot-piece being attached. Thus prepared, the limb is placed in a vessel of water as warm as can be borne, and of sufficient depth to come well up to the patient's knee. This bath should be continued for at least half an hour, an attendant adding hot water at intervals, so as to maintain the temperatnre at the highest point of endurance. When this is removed the excess of water is quickly squeezed off, a dry flannel wrapped about it, and over the whole a piece of rubber tissue, the size of which is sufficient to cover the limb from immediately below the knee to a point beyond the toes. This is made to prevent evaporation by tying with cords or application of bandage.

By this means heat and moisture are maintained at the point desired for one or more hours, when the removal of the rubber and flannel makes all ready for repetition of the bath. In this way the continuous benefits of hot water bathing are secured without handling the limb or the least jarring of the joint, and may be continued for days, if desired, without change of dressing. Of course the dressing may be removed at any time and for any purpose, but it is best to allow it to remain until we are quite sure that the benefits of hot bathing have been secured, when it should be taken off and the pad-stirrup adjusted as first described. Should this not prove to secure sufficient quietness, a longer splint, as the moulded felt, may be placed over it. Should the inflammatory state again occur, the above treatment should be immediately resorted to, as there are no other means of so readily and rapidly overcoming that condition in the joint. The acute is sometimes followed by a sub-acute or chronic inflammation that is to the last degree vexatious both to patient and surgeon, and besides that is unpromising as to results. In one case associated with hyperæsthesia, after failure of all other measures, the patient was placed in bed, his foot on a pillow covered with oilcloth so folded as to carry fluids into a vessel beside the bed. From a vessel by aid of a rubber tube with a small stopcock warm water was run on to oakum laid over the affected joint. After three weeks excellent results were obtained. In another case the parts were encased in a poultice of common blue clay and covered with rubber to prevent evaporation. Here the tenderness and heat were largely modified.

In chronic cases excellent results have been obtained from a liniment of a saturated solution of iodine in cedar oil. This must be allowed to cool before bottling, and applied until slight cracks occur on the outside.

But when the inflammatory stage is mastered the patient has only begun to get well. There is a long period af probation. As long as tenderness is discoverable by finger pressure the limb is unfit for the least use even for the trial test the patient is sure to make. Crutches are a help, but soon become odious. The stirrup bandage is somewhat bungling, and at a proper time may be substituted by a simple roller bandage snugly applied with many figure eight ankle turns. When the time arrives that the use test is to be made, at the very best there will be found to be a tendency to turning inward, accompanied by pain, the condition being that of weakness of the joint structure about the external malleolus. I have overcome this by taking a piece of rubber adhesive plaster two inches wide and fifteen inches long, and splitting the initial end about three inches. At a proper distance from this end, it is laid on the sole of the foot and the short tails brought up smoothly and made to adhere about the internal malleolus. The external malleolus being neatly padded about with cotton batting, the foot is held firmly outward, the long end of the adhesive plaster drawn taut, and its upper end made to adhere on the outer aspect of the leg. The patient presses it to secure its adherence while a roller bandage is applied from the toes to the upper extremity. This substitutes the outer ligamentous structure and affords not only security against injury, but the utmost confidence and comfort to the patient, and should be continued for a long time. An ankle support has lately been made that, fitting and lacing neatly, serves excellently when the ordinary shoe and stocking are to be worn, and is especially valuable to those whose best recovery leaves them with a weak and unreliable member. But during all the tedious and perplexing local treatment, the constitutional condition must not be overlooked. Anæmia, debility, or rheumatism, with many other conditions, may be factors in delaying recovery, and that require the most persistent treatment in conjunction with that described. With any measures it behooves the medical attendant to impress both patient and friends that time is a requisite; that faith, patience and endurance are a necessity, and that in a case of any considerable severity of symptoms, reckless efforts at use are sure to result disastrously—*Med. Standard.*

He Missed the Mark.—Young physician (to patient): "What you need is exercise, sir. You should walk more."

Patient (reaching for his pocket-book): "How much, young man? I was walking all last night with the baby."

TORSION OF ARTERIES IN HÆMORRHAGE.

BY J. B. MURDOCH, M. D., PITTSBURG, PA.

National Railroad Surgeons Association Trans. Condensed.

My experience with torsion as a hæmostatic dates back to the year 1872 when I became a member of the Western Pennsylvania Hospital staff. My colleagues had previous to my connection with the hospital been twisting arteries as large as the radial and ulnar. The facility with which this was done and the fact that the wounds healed kindly, and that secondary hæmorrhage did not follow, induced me to follow their example, at first timidly, but with success came confidence. Having been successful in the amputation of a fore-arm with no untoward result, I ventured next to twist the brachial after the amputation of an arm; soon after this the axillary, and then the politeal, and finally the femoral. And now for the last fourteen years torsion for the arrest of hæmorrhage after all surgical operations has been the recognized, and almost only method resorted to at the hospital.

It is to be regretted that records have not been kept of the number of the large arteries which have been twisted to arrest the hæmorrhage. The following table given with entire confidence of accuracy, is made from the records of the amputations:

Femoral - - - -	95 times.
Popliteal - - -	14 "
Axillary - - - -	15 "
Anterior Tibial - -	276 "
Posterior Tibial - -	276 "
Brachial - - -	62 "
Radial - - - -	40 "
Ulnar - - - -	40 "
Total,	818 times.

The manner in which the torsion was applied in these cases is that adopted by Bryant: "A good pair of forceps is required that will hold the end of the artery firmly, that has no lateral motion, and with serrations blunt enough to obviate any laceration or cutting of the parts seized by the blades. The vessels should then be drawn out, as in the application of the ligature, and three or four sharp rotations of the forceps made. In large arteries such as the femoral, the rotation should be repeated till the sense of the resistance has ceased. The ends should not be twisted off. In small arteries the number of rotations is of no importance, and their ends may be twisted off or not as may be preferred."

In all cases mentioned in the above table torsion of the arteries and veins was the method resorted to to control the hæmorrhage. In addition to these cases the method of torsion has been the one resorted to in all surgical operations performed during this period, such as amputation of the female breasts, the removal of tumors, the excision of joints, etc. It is within bounds to say that torsion has been resorted to in thousands of cases at this hospital without any mishap. No case of secondary hæmorrhage occurred which could fairly be attributed to the method of controlling the hæmorrhage. The advantages of torsion as compared with ligation are:

1. The greater facility with which it can be applied. For the ligation of an artery an assistant is required to seize the vessel and draw it out while the ligature is applied. For torsion the surgeon requires no assistant. The vessel must be seized with forceps in either case. In torsion it requires only three or four turns of the forceps to complete the process, which can be accomplished in as many seconds. When a ligature is applied, let the operator be ever so skillful, the thread may break or slip off the vessel, but if neither of these accidents occur, the process cannot be accomplished in anything like the same time.

2. Torsion is a safer method, being less liable to be followed by secondary hæmorrhage.

3. Healing is facilitated because the wound is free from irritating or foreign bodies.

It was true before the antiseptic treatment of wounds had come into such general use, but is doubly so now. The catgut ligature no doubt is a safer ligature than silk, for it does not require an ulcerative process for its discharge, and when this ligature has been made thoroughly antiseptic, is no doubt the best. But a ligature rendered thoroughly antiseptic is not always at hand, and those surgeons who have had the most experience with the antiseptic treatment of wounds will, I think, be the first to admit that, in spite of their most careful attention, septic germs are often introduced into the wounds by means of the ligature. Even after every precaution in preparation and preservation the handling of the ligature in its application is a frequent source of infection.

But there are other objections to its use; a catgut ligature may dissolve before the artery has become closed by the natural hæmostatic process, or it may unbind. Both of these accidents have been frequent cause of secondary hæmorrhage.

On a recent visit to some of the principal hospitals in New York City, where the operators and assistants possessed the greatest skill, I was not surprised to see that in many instances the ligatures broke, and in other cases slipped off the vessels before they were secured. This was to me exceedingly annoying to witness, when I knew that the vessels could have been so easily twisted while they were in the grasp of the forceps. When the question was asked one of the operators, a distinguished surgeon, "Why do you not resort to torsion?" the reply was, "We are afraid to trust it." This answer might have been given with equal force by Richard Wiseman in the seventeenth century, when asked why he did not resort to ligature instead of the red-hot iron. In a matter so important as the arrest of arterial hæmorrhage it is proper that surgeons should be conservative, but there is such a thing as pushing conservatism too far.—*Med. Standard.*

Disease of the Prostate.—She treatment of chronic prostatitis as recommended by Berkeley Hill (*British Medical Journal*) is general and local. The non astringent iron preparations, nux vomica and strychnine as tonics, belladona if there be micturition during sleep, and ergotine when there is much enlargement of the organ, with aching, constitute the general treatment. Locally he employs the cold sitz bath of a temperature of from 50° to 35° F., taken once or twice daily, at first for one or two minutes, and gradually prolonging to ten minutes, the cold douche on the perinæum, daily enemata of from 2 to 4 ounces of cold water, beginning at a temperature of 45° F., and gradually lowering to 35°, and in the later stages of the disease injections of ten minims of a solution of silver nitrate of a strength of 20 to 30 grains to the ounce, which must be repeated at intervals. In prostatitis arising from masturbation or excessive venery, one dram of the fluid extract of salix nigra, three times a day, will often check the involuntary emissions, while too speedy ejaculation during copulation may be relieved by the use of the fluid extract of damiana.

In the latter stages of the treatment of tuberculous prostatitis antisepsis is the main point to be observed. Dr. Hill recommends for this puropse the cleansing of the bladder by repeated small injections of boric-acid solution, to be followed by an antiseptic solution consisting of two grains to the ounce of sulphate of quinine. A still more powerful antiseptic is an emulsion of iodoform, the formula of which is: iodoform, 2 parts; mucilage, 4 ports; glycerine, 2 parts; water, 20 parts. One or two drams of this will removs all fetid ammoniacal urine and cause a marked improvement in the condition of the patient. If there be much pain experienced while washing out the bladder, an injection of cocaine previously given will overcome this difficulty.—*Am. Pract, & News.*

The Dyspepsia of Phthisical Patients.—Klemperer (*Berl. klin. Wochenshr.*, No. 11, 1889), concludes as a result of careful investigations that in the first stage of phthisis, hydrochloric acid secretion of the stomach is normal or increased, and that consequently in incipent phthisis the administration of hydrochloric acid is to be avoided, though proper in the terminal dyspepsia of the disease. The use of alkalines is perhaps indicated for the suppression of pyrosis, but this opens the door to fermentative processes, and thus increases the irritation of the mucous membrane. Especially advisable is the prescribing of drugs which are suited to remove the gastric weakness. Such are alcohol in any form, particularly cognac, and especially drugs. According to the author's latest researches creasote takes the first place among these. It should be given in capsules or in alcoholic solution, a quarter of an hour after meals, three times a day, in doses increasing from 0.005 to 0.2 gramme. It posesses a remarkable action on the diminished motor power of the stomach; the alcoholic solution being the best when it is well borne. The author believes that the favorable resuls so generally experienced from the use of creasote in phthisis are not due to a problematic antibacillary action, but to its power of increasing strength of the stomach. Besides creosote, strychnine, rhubarb, gentian, etc., are useful, as are electricity and massage. Of especial importance in the dyspepsia of phthisis is the condition of the general nutrition. If the body-weight increases and the character of the blood improves one can be sure that the evidence of dyspepsia will disappear. Too much attention, however, must not be paid to the subjective sensations of the patient in the initial stage of the pulmonary disease; as the appetite comes to the phthisical with the effort to eat. Finally, it is to be borne in mind, that the motor function of the stomach is under the control of the nervous apparatus, which in its turn communicates with the brain. Psychic treatment is, therefore, to receive proper consideration.—*American Journal Medical Science.*

Acute Articular Rheumatism.—In the treatment of this disease Dr. H. Linderborn thinks that sodium diosalicylate No. 2 is destined to supplant the use of salicylate of soda. "The dithiosalicylic acids, Nos. 1 and 2, are two isomeric bodies, each of which consists of two molecules of sulphur. No. 2 (sodium salt) is a grayish-white powder, very hygroscopic, and easily soluble without residue in water. According to Huppe, a 20 per cent. solution kills the anthrax bacilli in 45 minutes, in which time the ordinary salicylate has no perceptible effect; similarly with other bacteria. Four cases of poly-articular and one of the mono-articular rheumatism were treated,also one of gonitis gonorrhoica complicated with iridochoroiditis; the dose was 0.2 gram (3 grains) morning and evening—oftener in the more severe cases. The slighter cases showed disappearence of joint-swelling, pain, and fever in two days, the more severe cases in six days. One case was a relapse after salicylate treatmeut; nausea and noises in the ears were complained of, severe sweating occurred only when 0.8 gram (12 grains) were taken *pro die.* The last mentioned of the above cases was from another hospital, and the patient left cured in ten days. The advantages of this drug over salicylic acid are: stronger action, therefore smaller doses; tolerance by the stomach (the insoluble dithiosalicylic acid is precipitated from the sodium salt in an acid solution), and absence of unpleasant after-effects.—*British Medical Journal.*

What Shall We Feed Women After Confinement?—For–we might say centuries–the laity have insisted on giving "puerperal women" gruels, beef teas, toast water, from the first to the ninth day after confinement, and the fact is, two thirds of the physicians have fallen into this aged groove. We think this tea, gruel and toast bill of fare, practically a starvation diet,

irrational, impracticable, and a positive detriment to the patient. Is not the theory and practice a foolish one, when we consider for a moment that the organs connected with parturition will be more rapidly restored to the normal condition prior to conception; that the tissue changes, which we call involution, will be more quickly and perfectly accomplished, and that the new function of lactation will be more surely and plentifully established by a starvation diet? Does not common sense teach us that a diet, the opposite of the starvation one, is the proper kind to restore the uterine tissues to the normal state; and to prevent exhaustion of the patient by the unusual cell-waste incident to lactation? Our plan is to give the puerperal patient as good nutritious food as she has an apetite for, and can easily digest. The woman exhausted by labor needs rest. As soon as she awakens give her a good cup of beef, chicken or mutton broth; as soon as the general condition of the woman and the appetite calls for it, a safe guide, no matter whether it is the second or ninth day, gradually give solid foods—mutton-chops, tenderloin of beef, poultry or game.—*Ex.*

A Plan for the Relief of Whooping-Cough Spasm.—Dr. Naegeli publishes in the *Correspondenzblatter fur Schweizer Aerzte*, a paper on whooping-cough, in which he pays particular attention to the convulsive attacks of choking, describing the latter as follows: Spasm of the glottis makes every inspiration impossible, tonic convulsions of all laryngeal muscles follow, all muscles of the throat and at last those of the face also share in the attack. Trismus almost always is present during the acme of the convulsion, although the tongue generally protrudes. As soon as it is possible to open the rima glottidis again so far as to admit of sufficient air for respiration, all sensation of choking and congestion of the blood with their sequelæ disappear as by a miracle. Heiberg was the first to observe that the raising of the upper jaw is the best method of making the larynx admit air, and he recommended a plan for that purpose, which Kappeler had mentioned before him, and which Naegeli has modified and described as follows: Standing in front of the child, the nurse lays firm hold with the index and middle finger of the ascending ramus of the lower jaw in front of the ear, places both thumbs against the chin, and by strong but gentle traction and pressure moves the lower jaw forwards and downwards. If the mouth is a little open the jaw may be fixed by placing the thumb or index finger alone behind the anterior lower incisors and grasping the chin with the rest of the hand, performing traction as above. In all these cases the left hand rests on the forehead of the patient and performs counter-traction. If the nurse is behind the patient she may place both thumbs close above the angle of the jaw, the index on the zygomatic arch, and the rest of the fingers on the chin, pushing forwards and downwards. Immediately the upper jaw is raised the child must be told to draw a deep breath. The plan may be adopted even if the fit comes on during sleep, and Naegeli says that if so the child does not wake.—*Lancet.*

Creoline Injections in Dysentery.—Dr. N. P. Ossovski, of Tobolsk, in Siberia, communicates to the *Vrach* an account of a series of trials he has made of creoline injections in dysentery. The plan adopted was to place the patient on all fours, so as to relax as far as possible the abdominal pressure, and then, by means of a long, soft gutta-percha tube passed up the rectum, to inject slowly a half per cent. solution, or rather emulsion of creoline, allowing this to remain as long as possible, which was, in most cases, from five minutes to half an hour, but occasionally several hours. The injection was repeated twice, and sometimes three times a day, and in the great majority of instances very soon produced a marked improvement in the patient's condition, the tenesmus, blood, and number of stools becoming less or disappearing altogether. In some cases the dysentery was arrested, but a catarrhal condition was left. Here other treatment had to be restored to, as injections of acetate of lead and tannic acid, together with cinchona and sulphate of soda. Creoline injections were in no case found to produce any undesirable symptoms, though they were employed in children of under a year old, one of whom was suffering from cholerina, though they were used by Dr. Kolokoloff, a colleague of Dr. Ossovski's of a strength double as great as that mentioned above.—*Lancet.*

Incurability of Syphilis.—Dr. W. R. Gowers, in the concluding Lettsomian lecture upon syphilis of the nervous system (*British Medical Journal*, Feb. 16, 1889), says: "I believe that it is literally correct to say that we have no evidence that syphilis ever is or ever has been cured." Again ne says: "The conclusion that the essential element in the disease resists treatment, and runs it course uninfluenced by our efforts, is in harmony with what we know of other specific diseases due to a poison introduced from without, and communicable from one person to another. There is not any fact whatever to show that a single disease of this kind can be cut short. The course of the acute exanthemata cannot be arrested by any means at our disposal at any stage of their course, and the same seems to be true of this chronic exanthematous disease. This is emphatically true also of the disease that stands perhaps nearer to syphilis than any other known malady—leprosy."

Hematemesis, according to the *Pittsburgh Medical Review*, is quickly relieved by water swallowed as hot as can be borne in quantities of half a tumblerful to a tumblerful. No further hemorrhage occurs, and fragments of clots are vomited.—*College and Clinical Record.*

ORIGINAL ARTICLES.

THE PRINCIPLES THAT SHOULD GUIDE US IN THE RATIONAL TREATMENT OF GONORRHŒA.

BY BRANSFORD LEWIS, M. D., ST. LOUIS.

Read Before the Mississippi Valley Medical Association Sept. 11, 1889.

If we were to reckon progress in medicine by stages, we could select no more apt a term for designating the present one, than that of the Stage of Bacteriology. Bacteriology has assumed such an important role in all that relates to medicine or surgery, that our attention is drawn to it in the consideration of almost every subject in medical or surgical science.

And yet, dropping from this lofty plane of thought, which tempts us into the field of glittering generalities, and limiting ourselves to the more practical question at hand, let us enquire, what has this all-absorbing and comprehensive study and knowledge of bacteriology done for our assistance in the treatment of gonorrhœa? Has the hope of aborting, of quelling, of exterminating the disease by the treatment based on the discovery, study and acquaintance with the life-history of that sturdy villian, the gonococcus, been realized? Have the methods of treatment thus brought into vogue accomplished the great wonders expected of them? Have they accomplished anything more than the palliation, to a considerable extent, of the severity of the disease, of shortening, somewhat the duration of its several stages, and of doing away with the old and barbarous forms of astringent, caustic and stimulating injections? I believe that all those who have tried this or that new antiseptic, this or that 'infallibile germicide'—not simply on two or three insolated cases, in which beautiful results may have been attained and which, by the way, were in all probability not gonorrhœa; I say that all those who have tried such new antiseptic plans of treatment in a considerable number of cases are doubtless convinced that none are infallible; that all are subject to various influences, deleterious or favorable, that were met with in treating after the older, prudent methods.

Many beautiful and touching theories have been con constructed to explain how the gonococcus would quail with fear, when, in the midst of his revels, he should detect from afar the fumes of death-dealing iodoform, brought into action by means of this or that preparation; or of how he would shrink with horror at the prospect of being literally boiled alive by hot injections; or washed out into the cold, cold world by the relentless flood of a prolonged irrigation; or of being crushed in spirit, body and soul, by the continuous presence of a medicated gelatine bougie; or dried up into an Egyptian mummy of a coccus in the arid soil of a mildly astringent, antiseptic, non-irritating, magic-healing, absorbent powder! But experience with these agents would seem to indicate that the usual rule of the breeding of contempt by familiarity is not broken in this instance. Nay more! That the festive gonococcus, after a time appears to become sufficiently acclimated to enjoy his surroundings, for a while, at least. And this, notwithstanding the fact that antiseptics do kill gonococci, and with great certainty and facility—when they are in culture-fluids. But why not when they are in the urethra, as well? For this reason: the gonococcus in preparing himself for the conflict, does not foolishly remain where his foes can get at him with these various medicaments; he makes his landing and starts immediately for the woods, so to speak. He pushes on, by proliferation, between the epithelial cells, breaking through their connecting substance and finally ensconces himself below its deepest layers, along on the basement membrane, and even sometimes, within and between the interlacing fibres of this structure. Here he proliferates and disiminates to his heart's content.

This has all been repeatedly and absolutely proved by eminent investigators; Bumm has watched the invasion of the conjunctival tissues by the hordes of gonococci; has seen them penetrate to the connective tissue layer, and has observed the strong obstruction offered by this tissue to their further progress. Not only this,but he has seen that the effect of astringents applied over the epithelial surface serves only to constringe and harden this covering,which then,indeed,forms a sure protection against the absorption or leaking through of any germicide or antiseptic which, embodied in the injection or whatnot, has been applied to the mucous surface.

Moreover, he has seen that the elimination of the cocci contained in this meshwork of cells and fibres is brought about, not by the penetration of the germicides into the tissues, there to attack the organisms in their strongholds, as has been thought by some, but it is accomplished by a process of proliferation of the connective tissue fibres, into which gonnococci are unable to penetrate, as intimated above. In the stage of improvment, these fibres, incited by the irritation present, increase in number, push forward, driving before them the microbes towards the surface of the membrane, from which they are washed by the outgoing urine, or killed by the germicides. When a sufficiently strong connective tissue bulwark has been thus constructed, new epithelial cells begin to dot the denuded surface here and there. The cocci have by this time lost much of their vitality and are unable to break them down with the ease shown at the first onslaught. The conditions for resisting their inroads, too, are then more perfect. They lie simply along the surface or among the superficial cells.

So that the final process of cure depends, not altogether on the extermination of the few remaining gonococci, but also—and perhaps even more especially—on the closing of the tissues against their further invasion by the devolopment of firm layers of this protecting barrier. And the inflammation then persisting, may be interpreted as denoting the chronic irritation remaining

after the severe disorganization wrought by the previous disease.

It is for these various reasons, then, that in the earlier stages, when the gonococci themselves are doing the damage, the efficacy of antiseptics, germicides, astringents, etc., is limited to the position which they now occupy.

In order to overcome these impediments and give access of the medicines to the ambushed cocci, an enthusiastic Frenchman has recently suggested that the epithelial coat of the mucous membrane be scraped off by a brush-swab, on the plan commonly used in cleaning a pistol-barrel; after which the urethra is to be douched with a powerful antiseptic solution. This method is original and ought to prove effective—in producing a stricture, if nothing else. It is certainly more energetic than any I should care to undertake.

I would therefore submit that efforts at aborting or killing a gonorrhœa with strong medicines, antiseptics or otherwise, not only do not attain the desired end, but are ill-advised and liable to be followed by unfortunate sequelæ or complications. Consequently, treatment should be based on a plan having for its object the idea of carrying the disease through its various stages, as authors used to say, *tuto, cito et jucunde*; allowing the patient to experience as little discomfort, pain and annoyance as possible, mollifying the inflammatory reaction and destroying, devitalizing and discouraging the gonococci as much as our rather restricted powers will admit of; and hastening the healing processs with all possible speed.

To accomplish these ends, after having used various forms and modes of treatment, I have concluded that the one offering, with the general run of cases, the most advantages with the fewest objections, is that of giving, in the first stage of the affection, simply alkaline diluents and sedatives internally, making use of such adjuvants as dipping the penis in hot water, etc.; and, in the second and third stages, giving injections of lanolin, medicated with an absolutely unirritating antiseptic, to which may be added, in the third stage, a mildly astringent and stimulating antiseptic.

As a means of introducing the ointment, I have been using, during the last six or seven months, this hard rubber applicator, which I present for your inspection. As you see, it consists of a catheter-like stem, perforated at its end, which is inserted into the urethra to the desired depth; a box to contain the ointment, and a piston which is screwed into the box, driving the ointment before it into the stem and thence, through the perforations, into the urethra. When properly performed, an injection given by this method causes absolutely no pain or discomfort for the patient. But sometimes a sudden movement on his part will jog the stem against some tender spot, and evoke an immediate and earnest protest. To obviate this and to leave nothing undone that could in any way assist in avoiding irritation of any kind, I have had some vulcanized, soft rubber stems constructed, which answer the purpose very well. The square shape of the second (modified) box is of advantage in affording a securer hold on it. The stem need not be inserted as deep as its length will permit; the flexibility of the lanolin and elasticity of the urethral walls assure the spreading of the ointment over the inflamed area.

Messrs. Aloe & Co., of St. Louis, have kindly constructed the instruments for me.

As to my reasons for preferring lanolin to other vehicles, I would say that, with reference to the other vehicles, water, the most common, is itself, in its purest state, irritating, and unless it contain some local anæsthetic, will cause pain; powders or tablets, though dry and absorbent when first deposited, soon become moist and cake up, losing the properties for which they were chosen. Gelatine bougies give pain at every movement of the body until they are liquefied; mucilages or emulsions present no advantages which are not possessed to a greater degree by lanolin; and—a point of great importance—all of these are lacking in "staying" qualities; with the first passage of urine out they go, and in order to make their effect continuous, they must be renewed several times a day, entailing frequent repetition of the trouble, pain, etc., experienced each time.

Lanolin presents none of these disadvantages; it is wholly unirritating—is even soothing to inflamed tissues. When introduced pure, even without any pacifying sedatives, it invariably causes a feeling of relief and comfort to the patient who has been constantly reminded of his ailment by the teasing, harrassing sensation incident to all cases of gonorrhœa. As one patient remarked, the ease afforded allowed him to forget all about it for hours at a time, whereas, before he began to receive the treatment, it was never out of his mind while he was awake. I believe that the principal reason for this is, that it keeps the inflamed surfaces apart, preventing their continuous friction and auto-irritation. Actual pain in the urethra is also mollified by it.

The oiliness of lanolin assures its adhesion to the canal walls, even in spite of the flushing of the urethra by the stream of urine. It may be noticed floating on the urine of the second or third passage after the application. It is evident that in this respect, too, it surpasses all of the excipients named. An authority tells us that lanolin possesses antiseptic properties of no mean order.

I shall not take up more time in detailing its many advantages, which are almost self evident.

As to the medicament employed, any remedy given in solution may be prescribed with equal propriety in lanolin. Of the various drugs which I have used, I sum up my impressions as follows: Bichloride of mercury, even in minute quantities, is too painful or irritating, and frequently causes an increase in the pus formation; carbolic acid is also irritating but not painful; iodoform might be used were it less perniciously active in its odoriferousness. The zinc preparations are applicable to the later stages, in which they give material assistance toward shortening the wind-up. Resorcin would

be a most admirable remedy were it not a most aggravatingly unstable drug. If administered after it has degenerated, it will not be long ere the operator has cause to regret his efforts in the way of economy. Boric acid directly following the increasing stage of the affection, seems to fulfil every indication; it is an antiseptic, a germicide, and yet has absolutely no irritating effect on the inflamed membrane. It is capable of killing the gonococci that it reaches and of preventing attacks from other microbes which give rise to the secondary or mixed infection of Bumm. And, by the way, the continuous presence of the medicated lanolin forms a vigilant guard against this complication.

Agreeing then, with the dictum of all authorities of the present day, that gonorrhœa is a specific disease which cannot be aborted after it is once fairly started, I conclude that:

1. Our treatment should not have for its object the futile idea of jugulating the disease in its early but established stages.

2. The endeavor to control its severity, to lighten in every possible way all of its disagreeable features, to shorten its course and to ward off complications, should be our guiding principles.

3. No local agent does its share in fulfilling these indications more perfectly than does lanolin, medicated after the manner suggested.

1006 Olive street.

IS SENN'S GAS TEST INFALLIBLE AND ALWAYS DEVOID OF DANGER? TWO CASES OF SHOT WOUNDS.—CONCLUSIONS.

BY H. C. DALTON, M. D.,

Superintendent City Hospital, St. Louis.

Read before the Mississippi Valley Medical Association at its meeting at Evansville, Ind., September 11, 1889.

I report to-day one case of laparotomy for shot wound, and one in which an operation ought to have been performed, and would have been had I not been deterred on account of the failure of the Senn method, being led thereby to believe that the intestines were intact. It is not always pleasant to report our failures, but believing it a duty we owe the profession in order that our statistics may be reliable, I have made it a rule to report all my failures as well as successes in abdominal surgery.

It is true this course may subject me to criticism, owing to some sins of omission or commission, but as criticism will teach me wherein I have erred, I shall still be the gainer. Should the criticism be unjust, I trust it will proceed from him only who has never made a mistake in surgery. This apologetic prelude is written to induce you to "be to my faults a little blind" when you listen to the "o'er true tale" of the two following cases:

Case I.—B. J., colored, æt. 35, laborer, admitted to thn hospital October 25, 1888, was shot at a distance of twelve or fifteen yards three hours before admission, after which he was unable to walk, and soon felt a numb, dead sensation in the right leg, followed by pain in the abdomen.

Examination showed a shot wound an inch and half above, and a little to the right of, the anus, the probe passing upward and inward through the great sciatic notch into the pelvic cavity. The urine was drawn and found to be clear. There was absence of liver dulness to the extent of two inches above the border of the ribs. The patient was suffering from shock and intense pain in the abdomen, referred to the umbilicus. The extremities were cold, pulse 72, and respiration 39; rectal temperature, 96.6° F.

Assisted by Drs. Meisenbach and N. B. Carson and the hospital staff, I proceeded to make median laparotomy, using Senn's hydrogen gas test before making the incision. A small hole was made about two inches below the umbilicus, a glass tube was put in, and an ineffectual attempt was made to ignite the gas. When the tube was removed the gas escaped through the hole and ignited readily. Upon enlarging the wound the gas escaped with an audible sound. The bullet was found to have entered to the right of, and almost grazing the iliac vessels. It then entered the cæcum a little to the inner side of the appendix, and passed out an inch and a half above. Twelve holes were closed by the interrupted Lembert suture, iron-dyed silk being used—two in the cæcum (as described above), six in the small intestines, three in the mesentery, and one, the hole of entrance, near the iliac vessels. The bullet was not found, nor were we able to find it postmortem.

After a thorough peritoneal toilet we attempted to return the enormously gaseous-distended intestines, but found, that like Banquo's ghost, they would not down. It seemed our task was like that of Sisyphus, for as fast as we would replace one coil another would "bob up serenely from below" until our patience, as well as our patient, was well nigh exhausted. To make confusion worse confounded, about this time, when we thought our task almost completed, the intestines being nearly all reduced, two or three sutures gave way, and the cavity was again flooded with fecal matter. In the attempt to reduce them, the intestines were necessarily subjected to rather rough handling and considerable pressure, hence the rupture. The sutures giving way were those closing two holes which were very close together, and we found it difficult to locate the exact spot from which the feces escaped. We accomplished it, however, by a very simple, but I think important, method suggested by Dr. Carson, *i. e.*, allowing water from the irrigator to play upon the part while making pressure upon either side of the holes. The escape of the gas elevated the water to perhaps a half inch, indicating the exact site of rupture. An attempt was made to get rid of the gas by washing out the stomach, and putting a cylindrical speculum into the rectum to facilitate the escape of the gas, but this much-vaunted method failed utterly.

Here was a case where the Senn method not only did no good, but absolutely did a great deal of harm; but more anon. The case also teaches a valuable lesson, in that it should caution us, no matter how far away the wound of entrance may be, to look out for abdominal injury if the range of the bullet be in that direction. In a conversation with Dr. Senn some weeks ago, I informed him of the above facts. He stated that he had also been annoyed by the same thing, but it could be overcome by elevating the hips and using a large funnel-shaped towel to produce compression upon the intestines during their reduction. I do not believe that it would have worked in this case.

Case II.—Wong Gau, Chinaman, æt. 25 years, entered the hospital at 7:25 P. M., October 11, 1888. One hour before admission he was shot by a negro at a distance of ten feet, the bullet entering between the fourth and fifth ribs in the left axillary line.

The assistant who examined him (I was absent at the time) probed the wound and concluded that it did not penetrate the abdominal cavity, a very natural mistake as there were no symptoms pointing in that direction, except that he had vomited several times, the ejecta, however, containing no blood. When I returned to the hospital, three hours after the injury, the pulse had gone up to 100, temperature, 100° F., but there was still en tire absence of abdominal symptoms.

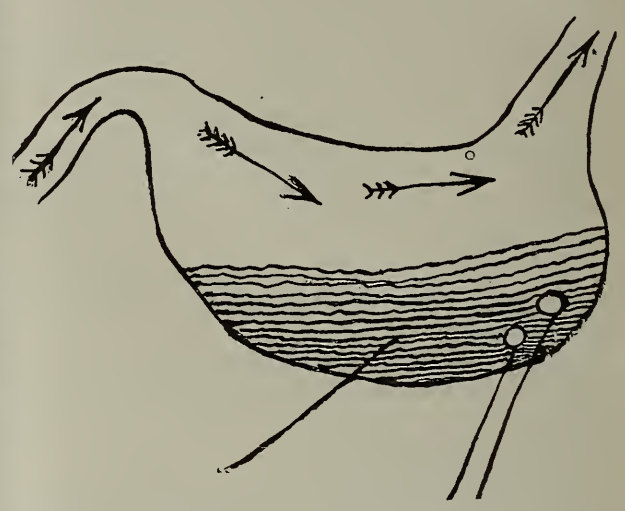
Suspecting, however, from the direction of the bullet, that it had penetrated the cavity, I resected two inches of the seventh rib in order to inspect the diaphragm. A hole was found in the same, about three inches from the thoracic wall. Through this hole I placed a glass tube and applied the hydrogen gas test, which gave negative results, although the tube was moved in various direc tions and removed several times to see if it was unobstructed. The urine wns drawn and found to be clear.

Having great faith in the gas test, I was satisfied that the alimentary canal was intact. My faith has already received several rude shocks, and I am no longer an enthusiastic advocate of the measure except in certain cases.

The diaphragmatic and thoracic wounds were closed with heavy chromatized catgut. Patient died twenty-eight hours after the injury.

The autopsy revealed two holes in the stomach and a large lacerated wound of the left kidney. The holes were on the greater curvature, three or four inches below the cardia. They were quite close together (half an inch of septum), each hole being about half an inch in diameter. The stomach was one-third full of semi-solid food, mostly rice, the consistence of which was so firm that it failed to run out when the stomach was elevated, nor did any escape antemortem. The food plugging up the holes and overlying them, accounts for the failure of the gas to escape. It naturally sought the higher and unobstructed portion of the stomach and by its pressure plugged up the holes still more securely.

During anesthesia the patient came near dying from interference with respiration, due to the great gaseous pressure upon the diaphragm. Had there not been large gaseous eructations, partially relieving the pressure, I believe he would have died upon the table. The case teaches that extreme care should be taken in giving the anesthetic during the gas test. It also teaches that the test is liable to deceive us at a very important juncture, and that we cannot positively depend upon it in gunshot wounds.



Food. Bullet holes.

The above cut shows the relation of the food and bullet holes to the stomach as revealed by the autopsy in case II. The arrows show the course the gas would naturally take in passing up the alimentary canal, rather than displacing the food sufficiently to gain exit through the bullet holes.

In the above case I might have turned the patient on the right side allowing the food to gravitate to the right leaving the holes free for the exit of the gas; but who would have suspected such a condition as we found in the case? or would have thought of the necessity of placing the patient in such various positions? It is certainly unusual to have a patient with both stomach and kidney so badly injured without some blood being vomited. or being found in the urine, and this assisted the Senn test to deceive us in the case. I object to the use of the gas test in shot wounds for the following reasons:

1. Because it is misleading, not being always reliable.

2. Because even if it give negative results, we should operate anyway, as we are not sure that the intestines are not perforated, and statistics give but poor encouragement to those who adopt the do-nothing plan,—the recoveries in such cases being less than eight per cent.

3. Because even were we positive the intestines were uninjured, there are other organs which are almost equally important, such as the liver, spleen, mesentery, etc., which might require prompt attention.

4. Because I believe there is danger of the gas forcing feces through the wounds into the peritoneal cavity, thereby adding to the gravity of the case. It is said

this does not take place, but I am loath to believe it.

5. Because of the additional danger during anesthesia from interference with respiration.

6. Because of the liability of the sutured holes to be torn open while handling the intestines, especially during the effort to return them to the peritoneal cavity, as in case I.

7. Because after their return to the cavity, owing to their distended condition, and the consequent pressure upon the diaphragm, it embarrasses respiration, *and hence adds to the shock.* I believe this to be a valid and most serious objection to its use. He who can put his patient to bed with the least shock, *caeteris paribus*, has the best chance of seeing him recover, for shock is the cause of death in the vast majority of cases; and certainly the liability to death during anesthesia, while not probable, is more likely to occur with the use of the gas than without it, and hence should be taken into account.

Those who have attempted to close the abdomen over intestines distended by gas can fully appretiate my statement. I imagine that a well person with intestines so distended would suffer from colic and a feeling of oppression consequent upon the great gaseous distention. Why should we add such additional danger to our patient, already in such a perilious condition, when a feather's weight may turn the scale against him? It may be claimed, and I grant it, that the gas soon becomes absorbed, but why subject a patient to an additional risk, even for a short time, at such a critical period? Then too, the preparation and administration of the gas takes up valuable time, but when one remembers that the saving of every moment in these cases is vitally important he naturally is anxious to get through at the earliest possible moment consistent with the proper management of the case.

Senn reports a case of shot wound of the intestines in which, after sewing up all the holes he could discover, he was enabled by the use of the gas to find another, low down in the rectum, which he could not have found without it. I imagine such cases are very rare, and do not counterbalance the harm which the gas may do in other directions. I would not leave the inference that I have discarded the gas test. I would use it in shot wounds of the back, and low down on the sides of the abdomen, where I could not positively determine whether or not the peritoneal cavity had been penetrated. In other words, where we are in doubt as to the penetration, use it, if we get affirmative results, operate. I think the test is more appropriate to stab wounds, for here we are often very much in doubt as to whether or not the intestines are wounded. When we are so uncertain, we should use the gas test; if it give negative results we need not operate, especially as we know that many penetrating stab wounds do not wound the intestines, whereas it is quite the exception—in fact a very rare occurrence—for a penetrating shot wound to fail to do so.

So I conclude that the fact that a shot wound of the abdomen is penetrating, justifies laparotomy, for, unless the ball be a spent one (a very unlikely occurrence), we can be almost certain that there is serious injury to the viscera. This is a rule to which the exceptions are too few to have any weight.

The gas test then in this class of cases is unnecessary. In penetrating incised wounds, however, the character of the injury is such that the viscera may, and in fact often do, escape.

I believe that this question should be thoroughly discussed, and the truth evolved, not only for the good of our patient, but also for the medico-legal aspect of the case. Self protection demands that the status of the test be definitely settled. I have not been able to find that any one has controverted Dr. Senn's claim that "rectal insufflation of hydrogen gas is an infallible test in the diagnosis of visceral injury of the gastro-intestinal canal in penetrating wounds of the abdomen." My experience will not allow me to subscribe to the statement.

I propound the query, "is the question settled?" and answer in the negative, believing it to be still *sub judice.* What say you after thoroughly weighing the facts in the above cases?

REPORT ON PROGRESS.

SURGERY.

BY H. G. HARVEY, M. D., ST. LOUIS.

The Treatment of Erysipelas, Furuncle and Carbuncle.

According to Tichomirow, the parts affected should be energetically painted three or four times daily with tincture of iodine. The callous form of erysipelas is no counter-indication. Painting is well borne over places unprotected by the clothing, while in other places some irritation is produced which may be rapidly allayed by rubbing with camphorated oil. The infiltration disappears rapidly and the temperature falls to normal the second day. The nasal mucous membrane is painted with iodoform glycerine.

Furucles and carbuncles are treated in an analogous manner, and in suppurations a similar procedure is practiced, the wound being freed from pus, painted with iodine and covered with a cotton dressing.—P. J. R., *Int. Jour. of Surgery.*

New Method of Treating Transverse Fracture of the Patella.

Mr. Mayo Robson reported to the Clinical Society of London, May 24, '89, the following treatment of a transverse fracture of patella just below the middle, the indirect result of a fall.

The parts over and about the joint were rendered aseptic and the joint aspirated. The skin was drawn well up over the upper fragment and an aseptic long

steel pin, was passed transversely through the skin and muscle just above the level of the fragment. A like pin was passed in a similar manner at the upper end of the ligamentum patellæ. About one half inch of the pins was left free at each end. Though not so stated, they must have been fastened together with a ligature. The parts were covered with antiseptic gauze and not disturbed for three weeks, during which time the temperature was never above normal and the patient was never uncomfortable. At the end of three weeks the dressing was removed. The fragments seemed well united. The pins were withdrawn, a plaster of Paris splint applied, and the patient allowed to go home.

This was the second case of the kind on which he had operated.

A necessary precaution is to draw up the skin over the upper fragment, in order to avoid undue traction over it when the fragments are approximated. The pins should be strong enough not to bend when drawn upon. If much effusion exists, aspiration would be desirable. It is always well to insist on the use of a Thomas' splint for some time after, as the amount of provissional callus is not appreciable.

Advantages claimed for the operation—simplicity, absence of risk, bony union.

Mr. Robson had done the same operation for fracture of the olecranon, but it was as yet too early to say anything as to the result.—*London Lancet.*

Drainage in the Treatment of Certain Injuries and Diseases Involving the Floor of the Cranium.

In *Annals of Surgery* for July, Oscar H. Allis, M.D., of Philadelphia relates the following case:

Geo. C., æt. 21, fell 30 feet from elevated railroad Dec. 6, 1888, was found unconscious and in a state of collapse; temp. 97° F.; pulse 50; resp. 12.

Restoratives were used, and in five hours after the injury the patient was gradually reacting, but was still unconscious. There was no noticeable injury except to the head. One inch above the right eye was a compressed comminuted fracture of the skull, the area of depression being one inch square, from which brain substance exuded. The angular points were removed and the opening enlarged. A fissure of the bone about one-quarter inch wide at the point of injury, passed down to the horizontal plate of the frontal bone. The dura mater had been separated from the bone at the time of injury, allowing the finger to pass between it and the bone down to the cribriform plate. With a narrow chisel passing through the right nostril, a hole was drilled through the cribriform plate. A three-eighth inch drainage tube was passed from above through this hole, the upper end on a level with the cribriform plate and the lower end passing out of the nostril. Another tube one-quarter inch in diameter, traversing the entire tract was introduced. The tract was then washed out with distilled water which had been boiled, the margins of the wound approximated and dressed; one-quarter grain calomel was given every two hours. On the fourth day the tract was washed as at first and the same thing was done every day thereafter; temp. 101.4° F. on the fifth day, but fell to normal on the seventh and remained so. Sixth day, mental condition such as to require no further protection of the dressing from the patient. On account of great pain the patient removed the larger tube. On the eighth day the other tube was removed and two strands of silk ligature were substituted. By February 2 the external wound was closed and recovery was complete.

Girl, æt. 6, fell while holding in her hand a slate pencil, which penetrated her right eyebrow near the inner end and broke off. Several fragments were removed. Intra-cranial inflammation ensued and death occurred on the seventeenth day after injury. The autopsy showed an abcess of the right frontal lobe of the cranium, enclosing a piece of pencil about one inch long. In such a case, which is on record, Dr. Allis would recommend to trephine above the orbit and pass the finger to the point of injury. "With a finger within the skull the exact point of skull fracture could be located. With the point of external injury known we have the unerring path of the original vulnerating body, and a probe passed along it would evacuate the abscess;" after which the finger within the skull could adjust the inner end of a drainage tube.

The same method is recommended in middle ear troubles when symptoms of meningeal inflammation show the steady advance of the carious process; the point for exploratory trephining being one that will readily command the middle cerebral fossa. The finger in the skull on the petrous bone, the carious mass may be approached with confidence from without with a drill or chisel. If cerebral abscess exist it can be drained.

Grafts of Frog Skin in Chronic Ulcers.

In the *Russkaia Meditzina* Dr. Nesteroosky relates four cases of old-standing, intractable, extensive and deep ulcers of the leg, foot and thigh, where, after all ordinary means had failed, grafting with frog's skin was invariable followed by permanent healing in from nine to fourteen days.

Method.—Take an ordinary water frog and immerse the lower portion of its body for five minutes in a $^1/_{1000}$ solution of corrosive sublimate; then pinch up a piece of skin on the abdomen and cut the desired number of grafts, each the size of a finger nail. Wash the grafts and the ulcer with a 4 per cent. solution of boracic acid, apply the grafts and cover the parts with boracic gauze and a piece of tow, fixing the whole with waxed cloth and a starch gauze bandage. Change the dressing and wash the ulcer on the third or fifth day.

The writer summarizes:

1. In all extensive and badly cicatrizing ulcers, skin grafting is indicated.

2. Skin quite free from glands and hair is most suitable.

3. Frog's skin completely satisfies those conditions.

4. The method is simple, safe, easily used everywhere, cheap and most effective.—*Brit. Med. Jour.*

TUBERCULOSIS IN SOME OF ITS SURGICAL ASPECTS.

Howard Marsh, F. R. C. S., discusses this subject in the *Brit. Med. Jour.* of July 13th and 20th and August 3d, chiefly in regard to the hip-joint. As predisposing causes, heredity, general ill health, age and inflammatory action are mentioned.

A large majority of cases of surgical tuberculosis begin between the third and eighth years of life. Surgical tuberculosis and phthisis are separated by an interval of five to fifteen years. Mechanical injury sets up inflammation of the joint, the tubercular process starts and continues while motion is allowed and is arrested when the joint is put at rest. The vitality of the bacillus tuberculosis is dependent on conditions either transitory or such as can be counteracted or removed. When these conditions are no longer present the tubercular process ends with the death of the bacillus and the tubercle with its products is a *corpus mortum* to be gradually removed by absorption, or as any other "sequestrum" may cause an abscess and be discharged, and leave the affected structures to undergo repair.

Two kinds of relapses occur:

1. Where the treatment was not long enough.

2. False relapses; treatment was sufficiently long and the joint freed of tubercle; but having been damaged it is more liable to inflammation when overtaxed. That the relapse is not tubercular is shown by the fact that recovery is complete in four to six weeks if proper treatment is used.

There is no constitutional element in tuberculosis. He believes these views are endorsed by a large majority of physicians.

Two forms of treatment, widely different, are practiced:

1. Excision, with the idea of removing all the affected structures.

2. Placing the diseased joint under the most favorable conditions, hoping that the tubercular process may be arrested and recovery ensue.

Excision cuts away instead of curing the diseased part. Its advocates claim that tuberculosis is a malignant disease, and consequently should be removed. The writer claims that this estimate should be revised since the evidence of the post-mortem room and laboratory is not all; a careful clinical observation of a large number of cases of tuberculous disease shows that a great majority of them happily escape the post-mortem room; and the post-mortem room itself shows that the process has often been completely arrested. Mr. Marsh does not question that the tuberculous joint is the source of acute general tuberculosis but shows from statistics of the Alexandra Hospital for Hip Disease that the mortality from general tuberculosis is less than five per cent. Hence he does not think excision justifiable, especially as it cannot ensure complete removal of the tubercle, nor is it at all certain that there are not already deposits at other points.

The treatment short of excision as practiced by Mr. Marsh is:

Prolonged rest in the horizontal position with extension of the limb; as soon as detected all abscesses are opened by an incision an inch to an inch and a half long and a small drainage tube, just long enough to enter the cavity, is used for two or three days. Antiseptic dressing is used and changed according to the case. In many cases the wound heals in two or three weeks or sooner; or a sinus forms which heals in a month or six weeks; or further opening may be necessary. But at length in a large majority of cases the wound heals. Early opening of the abscess is done because:

1. They are charged with tubercular material which should be evacuated as early as possible.

2. If left they frequently enlarge, lead to infection of surrounding structures, long sinuses develop with long-continued and exhausting suppuration.

3. By this method of treatment septic changes and their results may be avoided.

Unfortunately only a small amount of evidence as to the results of excision has yet been produced. Of 100 cases of excision of the hip-joint by Mr. Wright, a surgeon of well-known ability, about 20 per cent. were successful and 80 per cent unsatisfactory. The advocates of excision claim for the operation that it shortens the duration of suffering and illness; and secondly that the shortening of the limb is only a trifle more than in the most favorable cases of ankylosis after destructive disease of the joint. Mr. Marsh thinks the first claim cannot be affirmed, since the duration of time from excision to use of the limb in ordinary occupations of life is as yet undetermined. The average shortening of the cases treated at the Alexandra Hospital by non-excision is less than that obtained by excision, as shown by all the statistics he has had access to.

Mr. Craft says, "when pus, associated with panarthritis, is known to be present, even if the surgeon is uncertain with regard to the state of the bones he would excise." Mr. Marsh regards this rule stated without qualification as eminently misleading, for it ignores those frequent cases in which the formation of an abscess is the immediate precursor of sound recovery; the tubercular process has ended and the necrotic tubercular material acts as a sequestrum around which an abscess forms which being evacuated the necrotic material is swept away and the tissues return to their normal condition.

In regard to treatment short of excision, hip-disease is chiefly considered because excision has been most strongly advocated for it. By early recognition of the disease and early treatment abscesses may be prevented in 80% of all cases and hence better results obtained. In suppurating cases that recover 65% are good and 35

% moderate cures. The average shortening is one inch; 50% movable, 50% fixed. In non-suppurating cases that get well, 77% are good and 23% moderate cures. Average shortening $^2/_3$ inch; 50% freely movable; 25% slightly so and 25% fixed. Mortality due to the disease, about 6%; due to general infection from the joint as the primary center under 5%. In regard to excision the mortality from both the operation and from general infection from the joint is much higher.

As to the ultimate condition of the limb after excision information is limited, but such as is furnished shows the results to be not nearly so satisfactory as from non-excision.

Of the general group of tubercular diseases met in surgery the writer believes that if early and adequate treatment by prolonged rest is practiced not more than 10% will develop to a formidable degree and the period of treatment in early cases does not exceed twelve to eighteen months.

The average duration of the suppurating cases treated at the Alexandra Hospital up to apparent cure and free use of the limb was a little less than five years; of the non-suppurating, a little more than three years. But we are not to suppose they were kept in the horizontal position so long.

The writer says it is generally recognized by surgeons that excision of the knee in children is unsatisfactory, for in many instances the union of the bones gradually yields, the bones grow inperfectly, deformity follows and the functions of the limb are materially interfered with. He thinks the conclusions in regard to the hip will be much the same.

TRANSLATIONS.

HEREDITARY SYPHILIS.

Series of Lectures delivered at l'Hopital Saint Louis by Professor Fournier. Translated by Dr. Benno von Steinmetz.

Lecture VI.

To terminate the study of hereditary syphilis, there remain to be considered its prognosis and prophylaxis. What is most to be feared in syphilis, is its hereditary transmission. Of the numerous manifestations of the disease in the individual affected with it, some of the most grave are those which constitute cerebral syphilis. Now, compare the mortaility caused by cerebral, with that caused by hereditary syphilis, and you will be surprised at the preponderance of the latter.

Hereditary syphilis is the gravest injury inflicted on humanity by this affection. Not only in private families is it a cause of domestic calamity, but it is also a great cause of depopulation.

To what degree of frequency is hereditary syphilis manifested in families tainted with the disease? To solve this question, I have analized 500 cases taken from my notes, and the following is the result: In 223 cases, hereditary syphilis was not produced; in 175 cases it was manifested more or less throughout life; in 102, it was active for a certain length of time, after which it became inoffensive; thus of 277 families, more than one half were stricken in their decendants. We have therefore more than 50 per cent of syphilis reflected from the parents to the children.

These 500 families have had 1,127 pregnancies, of which 600 terminated favorably and 527, *i. e.*, 46 per cent unfavorably, (abortion, still-birth, infantile syphilis). The mortality was 42 per cent. I am convinced that these figures are very near to the general rule, and I have therefore good reasons for telling you that hereditary syphilis is a lamentable scourge. These figures have been taken from patients of the middle classes; it is different in hospitals. In seven years at l'Hopital de Lourcine I have seen 86 deaths per 100 pregnancies; Coffin has in one year counted 27 deaths per 28 pregnancies; at the Hopital Saint Louis I have observed 148 births with only 23 surviving children, which is a mortality of 84 per cent.

The percentage will vary according to the facilities for observation and the social class from which they are taken, but they show sufficiently clearly the murderous influence of syphilis on the offspring.

It is the disease which causes the most abortions and the greatest infantile mortality. The saddest of its effects is the death of a series of children in certain families shortly after birth. This terrible mortality is encountered quite often: 4 in 5, 8 in 11, 9 in 10, 11 in 12, 14 in 15, or even 4 in 4, 6 in 6 or, as has been observed by Rebemont, 19 deaths in 19 pregnancies. This poly-mortality takes rank as a veritable symptom, leading to the track of the disease and demonstrating to us a suspected syphilis, just as well as a gumma or any other material lesion would do.

Has hereditary syphilis any further consequences? Can it exert its influence in the second generation? It has been claimed that syphilis can be inherited from the grand parents. *A priori* this is possible and does not seem illogical. A number of examples have been cited but none show absolute proof. One of the best is a case reported at Atkinson. A syphilitic child born of a woman, who evidently had hereditary syphilis; the nose of the mother was enlarged at the base, the forehead projecting; she had interstitial keratitis and her brothers and sisters had been decimated by poly-mortality; her mother was suspected of having syphilis, but it was not proven.

In this case, as in all the other observations of this kind, the evidence is not complete. I have had half a dozen such cases which have convinced me of the truth of hereditary syphilis in the third generation; but which I cannot demonstrate to you as proofs, because in every case, a link in the chain of evidence seems to be missing. At any rate it is very diffieult, not to say impossible, to demonstrate syphilis in three generations; we even find it difficult sometimes to determine syphilis in the second generation, in explaining a case of tardy hereditary

syphilis. Let us be satisfied therefore, to say that the transmission of syphilis from the second to the third generation is possible, and even probable.

There remains for us now to learn how to protect those who are menaced by syphilis. The mother, child, nurse (for this study we have in view especially the syphilis of the husband, who is generally responslble for the introduction of the disease into the family). We will follow the chronological order:

A. What is the duty of the physician before the marriage of the patient? He must, 1, treat the future husband; 2, acquaint him with the danger he may cause to his future wife and children; 3, interdict his marriage, until by the means of treatment and time his disease has become inoffensive.

1. The treatment of the patient is the best prophylaxis, because it is the most powerful corrective of syphilis.

2. The physician too often contents himself with the treatment of the patient only; he should enlighten him as to the danger with which he will threaten his future wife (because the patient is nearly always a young unmarried man) and children. Many syphilitics, cruelly undeceived by the appearance of syphilis in the wife and the birth of syphilitic children, have told me: "If my physician had told me beforehand of these consequences, I would never have married. It is he and not I who is the true culprit." And this judgment, this condemnation is perfectly just in a great many cases.

3. The physician ought not to permit marriage to his patient, until by reassuring circumstances, he has become inoffensive, as a father and a spouse. Alas! Many of our confreres are on this point sadly tolerant. Marriage is permitted at the end of two years, one year, and even after several months. Treatment during a few months or even several weeks has been deemed sufficient! This is a great fault. The tolerance and complaisance of the physician in each case is a crime! It only results in letting the subject engage himself in a series of irksome, humilating and painful scenes, poison his wife, see his children die at their birth or before they are born, or behold the nurse contaminated by the disease. I have seen many such dramas, and I assure you that no situation in life is so heart-rending, as that of a man, who has introduced syphilis into his young household. Vis-a vis to his wife who does not or will not understand what causes all these troubles; vis-a-vis to his new relations, who see and who judge severely; vis a-vis to a child who has the aspect of an old man, sickly and debilitated; vis-a-vis with a nurse who reveals everything and covers him with shame and disgrace. Now think of the responsibility of the physician who knows that all this could, nay would happen, and who had given no warning! Is he not the greatest culprit? It is therefore a strict professional duty, to interdict marriage until the patient has become inoffensive.

B. What is the duty of the physician, if the marriage has been concluded? Three things. 1 Acquaint the patient with the danger he has created by his marriage; 2. treat him with special energy and try to cut short his danger; 3. Prohibit the procreation of offspring. It is necessary to tell him that in his present condition it would be a crime to impregnate his wife, because, not only would the offspring inherit the disease, but in all probability he would communicate the disease to its mother.

C. What must be done if the wife is already impregnated? This is of frequent occurrence. A young man contracts syphilis and receives little or no treatment; he marries without permission and soon his wife is in the family-way. All at once a change takes place; the young man who, until then has paid little attention to his disease, and has even married without remorse, is transformed; he regrets the step he has taken as soon as he learns that he is to become a father. He runs to the physician: "Can anything be done," says he to the doctor, "to prevent my child from inheriting the disease with which I am afflicted?"

If anything can be done this moment, it must be done —through the intervention of the mother, and by specific treatment only. Bofore answering the question of the husband, we must demand an examination of the wife.

If she has syphilis the solution of the problem is very simple; we must institute active treatment for herself, and for her threatened child. Despite the gravity of the prognosis, it is often possible to save the child; frequently the threatened abortion is avoided by the treatment of the mother and a syphilitic but a living child is born. Occasionally we have even better success, and the mother gives birth to a healthy child. Thus I have seen a young man get married in full bloom of the secondary period; five months later his wife became pregnant by him and presented symptoms of syphilis in her second month of gestation; she submitted to vigorous treatment and gave birth at term to a healthy child, which I have observed for 15 months without detecting any signs of the disease. Dr. Langelbert, senior, has published a similar case. We therefore must not hesitate to treat the mother.

This course seems natural, but it has been held in check by habit and prejudice for nearly four centuries. To have shown the necessity of treatment, is the work of the second half of our century. It was an undisputed doctrine, not to treat any pregnant woman for syphilis, because mercury was considered as an agent capable of producing abortion. Thus Mauriceau reports that in 1660, a syphitic woman had already lost one child through the disease; when she was impregnated again ulcers on both breasts, formed. "Fearing the transformation of these ulcers into cancers", this woman applied for treatment successively, to three or four physicians, who, despite the promise of a large fee, refused to treat her; they advised her to wait patiently until after her delivery, claiming they could not conscientiously give her murcury in her condition; this woman resolved to risk her life to get cured, found another physician, who, not being advised of her pregnancy, gave her murcury to salivation; at term, she gave birth to a healthy

child. Save a few spirited observers, like Mauriceau and Garnier, it was, up to the middle of this century, a doctrine, not to treat pregnant syphilitic women. Even in 1840, an eminent surgeon maintained before the Academie de Medicine, that it was the murcery and not s] ili s which produced the abortion.

[FINIS].

TREATMENT OF DIPHTHERIA BY HYDRONAPHTHOL, PAPAIN, AND HYDROCHLORIC ACID SPRAY.—Dr. Caldwell, of Chicago, reports in the February number of the *Archives of Pediatrics*, seven cases treated by the above spray. He starts with the theory that at first diphtheria is a purely local disease, and that the fever is due to the presence of leucomaines, while later the disease becomes general from the absorption of the microbes of septicæmia and diphtheria. The pseudo membrane is supposed to indicate the seat of primary infection, while the lymph-spaces underlying it are first invaded by the microbe. The indications for treatment following upon these propositions are: (1) Remove the pseudo membrane, so that the microbes can be reached; and (2) arrest their growth. To fulfil these indications Dr. Caldwell employs the following mixture·

℞	Papain - - - - -	dr. ij.
	Hydronaphthol, - - -	gr. iij.
	Acid. hydrochlor. dil., - -	gr. xv.
	Aq. ad., - - - - -	oz. iv.—M.

This spray, it is recommended, should be used every half-hour till the temperature is reduced and breathing is easy; then every hour unless the patient is asleep. When the spray was used thoroughly in the quoted cases, the temperature fell in from 4 to 8 hours. The fever in the early stages of the disease being due to the absorption of leucomaines, the fall of temperature was much more marked than it would have been had the treatment been delayed till the absorption of septic organism had caused the disease to become general. In addition to this treatment the bowels are ordered to be kept open, and the patient is fed upon 2 to 6 oz. of milk administered every two hours. Of the seven cases reported only one died.

WARNER'S SAFE CURE.—According to the *National Druggist* the entire stock of these remedies in the Vienna Pharmacies were recently seized by the police. The law requires that a copy of the formula be deposited with the authorities and the pharmacists. This has been complied with, and the *Pharmaceutische Post*, from which the account is taken, believes that the offence lay in the quack-like and charlatanic recommendations which accompany them, and against which many severe rulings and examples have recently been made. It will apparently take many years to educate this country even to the point of compelling the formula for these nostrums to be published. The recent failure in the New York legislature is not encouraging.—*Occidental Medical Times*, July, 1889.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,
EDITOR.

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SATURDAY, SEPTEMBER 28, 1889.

NUTRITION OF INFANTS.

The *Post Graduate* has a valuable article with the above title, by H. D. Chapin, M.D., of which the following is a brief abstract:

It is difficult to offer anything novel in connection with infant feeding, but that the subject will bear repetition is shown by the gross errors constantly being made in the dietetics of infancy and the disastrous results of mistakes at this time. Much of the great mortality of early life could be averted if we simply practiced the truths that are known with reference to physiological nutrition. Maternal nursing is often abandoned upon a hasty assumption that the milk is poor in quality or insufficient in quantity, whereas even if it is certainly ascertained that the breast-milk is inadequate, it is much better to partially nourish the infant in this way, one or two feedings a day from the breast being a great gain. We should watch whether a child appears satisfied or frets after nursing, or we may weigh it before and after nursing, when there should be a gain of several ounces. If, in spite of all tests, the infant is not developing well and appears thin and badly nourished, the breast should be supplemented by some artificial food. When dentition is very slow, especially if there be any evidence of rachitis, it is probable that the mother's milk is faulty, and additional nourishment must be provided. Not infrequently by the third or fourth month, the mother's milk begins to be insufficient, or she suffers under the drain of lactation, but if both mother and child are thriving, it is well to wait until eight or nine months, when semi-liquid food may be allowed. A soft pap, made with stale bread or soda cracker and milk, answers very well; solid food being withheld until the close of the first year, when a gradual weaning should be completed. It is, of course, desirable not to wean a baby in hot weath-

er unless it can be under the best hygienic surroundings. Certain developmental changes, notably rachitis, are apt to be caused by late nursing.

Cows' milk is the most suitable and available basis for a substitute for human milk. The composition of the latter is not always the same, the greatest variability being in the albuminoids, the most necessary ingredient for nutrition, and back of physiological analysis there is a mysterious and vital action not revealed by the microscope, Nature's power of adapting the constitution of the milk to the condition of the child. Still, much can be done to bring cows' milk up to a condition resembling human milk, and the problem is, after reducing the proportion of albuminoids, to prevent or act upon the coagulum in such a way as to split it up into small component parts, and finally to bring the milk sugar and fat up to their proper strength.

Of course, the caseine causes the most trouble. There are two ways of acting upon it, the mechanical and the physiological. Certain substances, as oatmeal, barley, gelatine, dextrine, sugar, gum, etc., by being added to cows' milk, act physically as attenuants of the caseine, but they in themselves, however, possess qualities that may be either beneficial or injurious to the infant's nutrition. In infants under three or four months, the salivary and pancreatic glands are in a rudimentary condition, and if they appear to thrive upon starchy food at this time; it is largely from the physical action of the starch upon the caseine of the milk taken with it. Very little of the starch is digested, and its use at this time is always liable to cause trouble. Our choice of the cereal may depend upon the condition of the infant. If there be looseness of the bowels, wheat flour that has been subjected to prolonged heat, or barley, which is deficient in fat, may make the best attenuant, or where constipation is present, oatmeal may serve. Gelatine has value as a nitrogenous food, besides modifying the coagulum. The reaction of the milk must receive attention, for while human milk is neutral, cows' milk is nearly always more or less acid, and by rendering it alkaline, a much looser coagulum will form; lime-water is thus an excellent diluent. particularly in early infancy, when the starches are contra-indicated.

The caseine may be dealt with by peptonizing it, preferably with a reliable pancreatic extract. The milk should not be completely peptonized, or it will acquire a bitter, disagreeable flavor. It is better to bring up the sugar to the right proportion by adding lactose or dextrin, rather than case or malt sugar, as the latter are more fermentable. The proper dilution of cows' milk is, at birth three parts of water to one of milk, gradually increasing the strength of the latter, until at three months equal parts of each may be given. It is always well to add a small quantity of water.

Condensed milk, though it sometimes makes a good temporary change, is theoretically undesirable, on account of the large amount of saccharose, and because, as ordinarily diluted, the proportion of caseine and fat is too small. It makes fat babies, from the excess of sugar but they are apt to be more flabby than strong. Of the various infant foods, the milk foods produced by combining the cooked cereals with condensed milk are preferable.

When infants cry it is not always because they are hungry, but often from thirst, and a more liberal supply of water with a restricted diet would doubtless prevent many attacks of diarrhœa.

Parturition in China.

Obstetric practice in China presents some points of difference from our own, as may be seen from a letter of A. M. Fielde, M.D., to the *Med. News*.

Nearly all the women maintain a sitting posture during labor and delivery. A few are unable thus to bring forth the child, and they are called "recliners."

If there is much delay in the expulsion of the secundines, various methods are pursued in assisting the patient. The mother-in-law as usual comes to the rescue, or the midwife goes behind the house in which the patient lies, raps smartly with a carrying-pole on the wall and shouts, "Is it out yet?" An assistant responds from inside the house, "It is out." This performance is repeated with short intervals until the desired result is effected. Another method of hastening the expulsion of the after-birth is to have the patient lean over a horizontal bar, supporting herself partially upon her hands. This sometimes starts the adherent placenta, but is discomforting to the attached infant.

Some widwives insert the hands and remove the placenta, but this is on the verge of malpractice, and mothers greatly fear the operation. It is asserted that one woman had her liver pulled out by the attending midwife, and consequently died. Native male physicians are, under no circumstances, called in cases of childbirth.

A girl that is born face downward, or one that is so disrespectful as to be guilty of micturition or defecation immediately after birth is straightway smothered, because of a superstition that such a child would be injurious to its parents.

A pregnant woman is advised not to handle edged tools. If she does so her offspring is likely to lack a finger or a toe, or to have a harelip or a split ear.

Two pregnant women will not sit together on the same bench. As each woman hopes that her child is a male, and as it is thought that there may be an occult exchange of sexes between embryos that are brought into vicinage, it is considered wise to avoid the risk of having the supposed masculine tenant of the womb superseded by a female.

If a child has been touched by a pregnant woman and sickens soon afterwards, its mother winds a skein of silk, made up of threads of five colors, around a potato, and roasts the potato in the ashes. If the silk is burned during the process of roasting it indicates that the ailment was not caused by the touch of a pregnant woman. But

if the silk is not burned, as sometimes happens, then the mother of the child throws the potato over her house, and it is believed to produce a miscarriage in the woman who caused the disease, while the sick child recovers.

Many men have purses made by women approaching confinement, hoping that the woman's plethoric condition will be mystically reproduced in the money bag.

The Significance and Detection of Traces of Sugar in the Urine.

It has been for some time a disputed point as to whether it was normal for the urine to contain a trace of sugar. Dr. Geo. B. Fowler, in the *Post-Graduate*, believes that this controversy is about decided, and in the negative. Those who maintain the affirmative have either been obliged to employ large quantities of urine, concentrate it by evaporation, and bring to bear profound chemical knowledge in order to demonstrate a trace of sugar, or they have depended upon the reducing properties which normal urine possesses when treated with some of the standard tests for glucose. Now, normal urine, which will respond to the reduction test will not respond to the fermentation test.

It is generally acknowledged by those who consider sugar to be a normal constituent, that urine contains something else capable of reducing cupric oxide. Uric acid has long been known to possess this property, but it has remained for Mr. G. S. Johnson, to discover that kreatinin is of still more importance in this respect. It is the latter which causes all urines to react with the picric acid test, and when both kreatinin and uric acid are removed from the urine, the final filtrate has no reducing effect, either with cupric oxide or picric acid.

Mr. Johnson concludes that cupric acid will be reduced by the normal urine in quantities equivalent to the reduction effected by 0.43 to 0.51 grains of glucose to the fluid ounce. The total reduction affected by normal urine is accounted for by the uric acid and kreatinin which it contains.

The author, after repeating Johnson's experiments is perfectly satisfied as to the correctness of the above conclusions, and believes that the verdict must stand: Normal urine contains no sugar. If this be the case, the presence of sugar in the urine in any amount must have some significance, and it is important to be familiar with the possible conditions under which it may occur. In the first place, the terms diabetes mellitus, and glycosuria are frequently confounded, and to make a distinction, without going into the unsettled pathology of glycosuria, with or without diabetes, it may be laid down that diabetes mellitus is the result of a central lesion of the nervous system, while glycosuria is caused by direct irritation of the hepatic vessels by toxic constituents of the blood.

Leaving aside the glycosuria due to transient causes, such as the rapid absorption of an excess of starchy or saccharine food, slight nervous derangements, physical exercise, etc., and only temporary in character, we find this symptom occurring in a number of diseases, among which may be noted gout, dyspepsia, certain nervous disorders, and neurasthenia and others. It is also found in the aged.

Where sugar, even a trace is found, either constantly or intermittently in a given urine unassociated with the diabetic element, and associated with ascertainable bodily ills, it indicates danger just as the discovery of a trace of albumen in the urine means, look out! As it is not true that every case of albuminuria means Bright's disease, so traces of sugar in the urine do not always indicate diabetes mellitus; but we should bear in mind the frequent connection of glycosuria with serious and fatal affections of the brain, the kidneys and the heart. This point is of especial importance to life insurance companies, and the more so since a man who has a serious chronic disease, as a rule, develops an insatiable desire to have his life insured.

It is not always easy to detect a trace of sugar in the urine where the diabetic element is absent, and of all the tests which are known to possess characteristic reactions with glucose, only a few are applicable to the urine under conditions convenient, satisfactory and comprehensive to the practicing physician. These are the fermentation, Trommer's (or Fehling's modification), and the bismuth test.

In conclusion:

1. Normal urine contains no sugar.
2. The reducing power of normal urine upon cupric oxide and picric acid is due to uric acid one-quurter and kreatinin three-quarters. Both these bodies may be removed by the use of sodium acetate and mercuric chloride, after the manner described by Johnson.
3. Any reduction of picric acid or cupric oxide after this manipulation is due to sugar.
4. Sugar may persist in traces, unaccompanied by the diabetic element.
5. Diabetes may be warded off by recognition of the first appearance of sugar as a persistent ingredient of the urine.

Feeding in Cases where Intubation is Practiced.

Many practitioners have no doubt experienced difficulty in feeding patients with ulcerations of the epiglottis, or in whom intubation of the larynx had been performed, from the pain and severe paroxysms of coughing excited by the entrance of food material into the lower air passages. A simple plan suggested by W. E. Cassellberry, M.D., consists in lowering the patient's head somewhat below the rest of the body, so that swallowing is effected by muscular action alone; he suggests an angle of about 20° as suitable to most cases; the smallest angle that will effect the desired result should be used, as there is less danger of the tube slipping out, it being conceded that rather small and loose tubes are preferable to tightly fitting ones. The improved

method of feeding should contribute to better results in certain cases of diphtheria.

MEDICAL ITEMS.

Dr. J. W. Lanius is traveling in the interest of the Review; we bespeak for him the kind consideration of our friends.

Hydrophobia From Bite of a Cat.—The North Carolina *Med. Jour.*, relates an instance of hydrophobia from this source.

Death of Dr. Habershon.—We are pained to learn of the death of this illustrious author and practitioner. His demise occurred in England recently.

Hydrochlorate of Spermine.—In pursuance of the Brown-Sequard elixir theory, Parke, Davis & Co. have isolated this alkaloid,and experiments conducted in their laboratory go to show that it is a powerful physical mental stimulant.

Conventional Mourning or Health?—The New York *Med. Jour.*, Sept. 14 declares war against the conventional use of the drapings of mourning, on the grounds that they are unhealthy, physically injurious and disastrously expensive.

The Danger from Overhead Wires.—This question is being agitated in London, and it is probable that some means will be taken to do away with the nuisance. It is hoped that the Dorsett Conduit being laid in this city will prove a satisfactory solution af the problem.

And Still Another!—Dr. I. N. Love announces the prospectus of a new monthly medical journal to be edited and published by himself, the first issue of which will appear in January next. The title will be The Medical Mirror.

Dr. Love admits, in his prospectus, that "The Mirror" is not established to fill a "long-felt want," but "owing to the fact that its editor has a fondness for journalism —a love for the profession, and a desire to be in close communion with it, and a willingness to indulge the luxury of this medium."

We wish it all success.

Pelvic Peritonitis Caused by Violent Pressure on the Uterus Post Partum.—Dr. Munn in *Pitts. Med. Review*, reports a case which illustrates the injurious ef fects of a too forcible application of Crede's method.

"I recently visited a woman in labor, for the purpose of removing a retained placenta. The woman in at tendance had made traction with the cord, and partially detached the placenta; the woman was bleeding freely. Alarmed at her condition, I immediately placed my hands above the fundus of the uterus, and exercised what I thought a proper amount of compression—what I supposed was the exact method of Crede. The hæmorrhage was controlled promptly. I continued the pressure, and a moment later the hard ball, which could be felt in my hands, disappeared. Examining through the vagina, I felt a rounded tumor in the posterior cul de sac. I had exercised too great violence, and retroflexed the uterus. The patient progressed favorably. A week later, she was seized with all the symptoms of peritonitis. For two or three weeks, her condition was so serious that I daily expected her death. After that she made a slow recovery.

Wake Up, Brother; This is '89.—The following remarkable statement in the *Med. Summary*, September, is from the pen of Dr. Silas Hudson, of Illinois:

"The commingling of the semen of a plurality of men frequently causes gonorrhœa and syphilis, by changing the character and habits of spermatozoa or bacilli, which are originally and ordinarily innocent. I am inclinedto believe general or constitutional syphilis, leprosy consumption, are sometimes produced by her absorbing the semen of different men. I do not say by one act of promiscuous intercourse any one of the diseases is produced; but I mean by long, frequent, and promiscuous intercourse. Dr. Geo. J. Monroe, in June number, gives a case of a patient taking a chancroid from a prostitute. I am inclined to think he took it while the poison was being generated in the vagina, before she was infected. A chancre is the same disease as chancroid, rendered a little more savage by a still further evolution of the same organism."

What's In a Name?—In speaking of the disposition of newly-fledged editors to appropriate names for their journals that are already in use, the *Medical Record* says:

"For the sake of peace, however, and in order to promote a fraternal feeling among our contemporaries, we advise our young friend, (The *Western Med. and Surg. Reporter*) to change his name, and start life with a designation that will be all and entirely his own. We might, indeed, suggest a few names from which he could select one that pleased him most. In the first place, the names of instruments furnish an inexhaustible source from which appropriate titles may be drawn. The *Lancet* and the *Scalpel* have been taken, but enough remain to offer a rich choice. We have the bistoury, the chain-saw, the forceps, the hypodermic syringe, the speculum, the catheter, and a host of others. Then there are other names relating more particularly to the avowed objects of the journal, such for example, as the Occidental Boomer, the Western College Puff, the Missouri Doctors' Own, the Foe of the Atlantic, and many others. It would be allowable also to imitate, though not to copy, the title of some already existing periodical. Thus, instead of the name that it has so rashly chosen, it might be called the Relator of Medical and Chirurgical Facts and Fancies, or, in imitation of the *Medical Waif*, the St. Joe Foundling."

BOOKS AND PAMPHLETS RECEIVED.

Prolapse of the Womb, with Especial Reference to the (so-called) Hypertrophic Elongation of the Supra-Vaginal Portion of the Cervix, with Report of a Case. By Lewis H. Adler, Jr., M.D., late Resident Physician University Hospital, Philadelphia. Reprint from "Med. News."

Experience and Incidents Connected with 691 Obstetrical Cases. By N. Guhman, M.D.

Decennial Catalogue of Blackburn University, Carlinville, Ill., 1889–90.

Saunders' Question-Compends, No. 1: Essentials of Physiology. By H. A. Hare, M.D., (Univ. of Pa.,) Demonstrator of Therapeutics and Instructor in Physical Diagnosis in the Medical Department, and Instructor in Physiology in the Biological Department, Univ. of Pa.; Physician to St. Agnes' Hospital and Dispensary for the Diseases of Children of the University Hospital. Pp. 193. W. B. Saunders, 913 Walnut St., Phila., 1888.

The Essential Factor in the Etiology of Stricture,and Its Bearing Upon the Question of Radical Cure. By John P. Bryson, M.D., St. Louis. Reprinted from the "Journal of Cutaneous and Genito-Urinary Diseases," Aug., 1889.

Thirteenth Annual Announcement of the Ensworth Medical College and Hospital, St. Joseph Mo., 1889.

Manual of Dosimetric Medicine. Burggraeve. "The Dosimetric Med. Review."

Annual Announcement of Western Reserve University, Cleveland, Ohio, session 89–90.

Dr. S. L. Kilmer's Physician's Pocket Day Book, Journal and Ledger, Combined. South Bend, Ind.

American Armamentarium Chirurgicum. George Tieman & Co., New York.

The Elements of Therapeutics and Practice. Dosimetric System. By Dr. D'Olivera Castro. D. Appleton & Co., New York, 1889.

Nervo-Vascular Charts. Jno. B. Deaver, M. D. F. A. Davis, Philadelphia.

The New Handbook of Dosimetric Therapeutics, or the Treatment of Diseases by Simple Remedies. By Dr. Ad. Burggraeve. Translated from the French by H. A. Allbutt. E. Fougera & Co., New York.

The Astley-Cooper Prize, amounting to $1500, will be awarded in 1892. The question proposed is, The Influence of Microorganisms upon Inflammation. The papers must be written in English, or accompanied by an English translation, and should be addressed before January 1, 1892, to Guy's Hospital, London. The prize will not be awarded to two or three working conjointly.

CORRESPONDENCE.

DIABETES IN HUSBAND AND WIFE.

Chicago, Ill., Sept. 12, 1889.

Editor Weekly Medical Review.—In your issue of Sept. 7, I observe a note relative to the frequency of diabetes in both husband and wife. In your further development of this subject you may state me as having observed this phenomenon about five years ago. The husband was sent to me for examination because he had been refused re-admission to a life insurance company, whose payments he had allowed to be in arears. As I had to report the existence of surgar in the urine, the wife came to talk about the question and requested me to examine her urine also.

To my great astonishment I found that there was also saccharine in no doubtful quantity. I took precaution to have the husband pass his water in the office. For the sample from the wife I was dependent upon her veracity and care.

I looked upon it as a curious coincidence and paid no further attention to it. On mentioning the fact to a colleague he sceptically and jokingly replied: "Look for the microbe."

If the relative frequency is found to be greater than the theory of probabilities would suggest it might be pertinent to enquire which of the two—husband or wife was first affected? In the case that came under my observation it would seem to be the husband. I have not, however, and had not then, any reliable means of knowing. Yours,

R. Tilley, M. D.

SOCIETY PROCEEDINGS.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Annual Meeting held at Evansville, Ind., Sept. 10 to 12, 1889.

Dr. H. C. Dalton read a paper (see p. 243) entitled,

Is Senn's Gas-Test Infallible and Always Devoid of Danger?

DISCUSSION.

Dr. G. Frank Lydston.—Dr. Dalton expressed a belief that no one had as yet taken issue with Dr. Senn in regard to the reliability of his gas-test; an article appeared not long since in one of the journals, in which a case was reported where, after the test was made with a negative result, the patient died and the intestine was found to be perforated in several places.

Dr. Ap. Morgan Vance.—I wish to endorse everything that Dr. Dalton said regarding the Senn method; I have always thought it an impracticable measure.

Dr. A. S. Steele, Charleston, Ill.—Last March I had a patient wounded in the abdomen; we made the gas-test but no gas escaped through the bullet wound. On the request of the patient we opened the abdomen,found eleven holes in the small intestine and one in the large.

Dr. Dalton.—Dr. Senn could possibly answer the gentlemen who state that the test was made and afterward the perforations were found in the gut, by saying that the test was not perfectly performed. But he could not make any such claim against the objections which I urge, for instance in the case where the gas burst the wound that had been ruptured; nor in the case of the Chinaman, where the holes were plugged with rice, preventing the escape of the gas.

Dr. A. S. Barnes, of St. Louis, read a paper entitled

The Accoucheur and His Forceps,

in which he advocated most emphatically the use of the forceps under many circumstances in which their use was held to be wrong by a considerable portion of (misguided) professional brethren. All physicians should be able to deliver a woman with the forceps and not be compelled to send for some one else at the critical moment.

In reference to the general conduct of the labor, the author said that washing out of the vagina and uterus was both unphilosophical and meddlesome, and frequently harmful. Ergot has no place in child-bed; when it does act, it does so intermittingly and endangers the child from asphyxia. Anæsthetics are not advisable as a general thing. Chloral may be given for stopping contractions.

Dr. Wathen.—The use of the forceps is just like any other surgical procedure; if used properly, and at the proper time it is all right, but when used improperly it is capable of doing a great deal of harm.

Dr. Bell, Indianapolis.—I do not believe that a tedious labor is any indication for the forceps. There are two dangers: that to the mother, and that to the child. If the child is in danger we can risk something as to the mother.

Dr. Murdoch.—The ideas advanced in the paper, I have long held. I believe that the general practitioner does not resort to the use of the forceps often enough—not only for the benefit of the woman and child, but for his own benefit. In some cases, I think, the practitioner is justified in using them for his own sake; many a sleepless night may be avoided in this way.

I think the rules for applying them as laid down in the books are unnecessarily complicated. They should be applid simply with regard to the anatomy of the mother, and not with regard to the child's head; they can be applied only in the lateral position.

Dr. Arch. Dixon.—I agree with the author in regard to ergot, but as to his statement with regard to anæsthetics, I think he absolutely does himself a wrong.

Dr. Barnes.—Dr. Bell does not seem to believe that tedious labors are dangers; then he is one of the few who hold to this opinion.

Dr. J. M. Mathews, of Louisville, read a paper (will be published) on the

Treatment of Fistula in Ano.

Dr. J. B. Murdock, Pittsburgh.—This reader is to be congratulated on the success of his cases. This method is evidently a good one but as he says, it must be limited to a certain class of cases, those which can be cured also by injection. We know that fistulæ do not heal like other wounds because of the constant motion that takes place during defecation, from the spasm which the passage of the feces causes. The principal reason that the knife is beneficial is because it divides the sphincter and affords rest. It also opens up the sinus so that there is perfect drainage. The ligature accomplishes just what the knife does, but it takes longer to do it.

For the worst class of fistulæ there is no remedy which will take the place of the knife except the thorough dilatation of the sphincter. I cannot agree with Dr. Mathews that every tract must be opened as well as the main tract. If you dress antiseptically after incision of the main one, and get perfect rest, it will get well.

Dr. H. H. Grant, Louisville.—With respect to the application of the ligature, I have been taught to disbelieve in its efficacy. Treatment is far more satisfactory after the radical and thorough incision. I have but little confidence in the instrument presented by Dr. Mathews.

Dr. W. H. Wathen, Louisville.—I wish to differ from Dr. Murdoch who thinks that the persistence of fistulæ is from the contraction of the sphincter muscles. Were this true, these tracks would never heal after the method of Dr. Mathews, that of dividing one, two or three parts of the track.

The plan of getting union by first intention is certainly a great improvement. I have found that in operating on the perineum the most satisfactory suture is the animal suture; I would suggest that this be used in these cases, with the hope of conducing to primary union.

Dr. Arch. Dixon, Henderson, Ky.—I have examined the instrument and I must say that I have never yet seen a case in which I would rely on that instrument to cure it.

The only radical cure for fistulæ that I have found is the thorough use of the knife, scraping out the track and treating the wound antiseptically.

Dr. Mathews.—I want to reiterate my remark that I make no great pretensions for the instrument. I said that it is applicable in only a very few selected cases. Dr. Dixon talks like a surgeon; if it were left to me to decide as to the manner of treatment, every single fistula that I have operated on would have been treated with the knife; but patients will not always submit to this; and there are few expedients by which these tracks can be cured without subjecting the person to the ordeal of the knife.

My record book shows some ten or fifteen cases cured by this instrument; so it cannot be said that it is always inefficacious.

SOCIETY NEWS.

The Golden Belt District Medical Association of Kansas meets at Salina, Kansas, October 3.

American Academy of Medicine.—The Annual Meeting of the American Academy of Medicine for 1889, will be held at Chicago, Ill., Nov. 13th and 14th, being postponed to that date by the Council.

Southern Surgical and Gynecological Association.—The following is a preliminary programme of the Southern Surgical and Gynecological Association which meets at Nashville, Tenn., Nov. 12, 13 and 14, 1889.

PAPERS TO BE READ:

The President's Address; Hunter McGuire, M. D., LL.D., Richmond, Va.

Report of Gynecological Work, with Especial Reference to Methods; R. B. Maury, M.D., Memphis, Tenn.

Direct Herniotomy, with Cases; W. O. Roberts, M. D., Louisville, Ky.

Open Abdomial Treatment; B. E. Padra, M:D., Galveston, Texas.

The Abortive Treatment of Acute Pelvic Inflammation; Virgil O. Hardon, M.D., Atlanta, Ga.

The Importance of Early Treatment of Inflammatory Affections of the Uterus; Wm. C. Dabney, University of Virginia.

The Relation of the Nerve System to Reparative Surgery; Thos. O. Summers, M.D., Jacksonville, Ela.

Concerning the Causes of Frequent Failure of Relief of Reflex Symptoms after Trachelorraphy; W. E. Hyer, M.D., Meridian Miss.

Cranial Surgery; DeSaussure Ford, M.D., Augusta, Ga.

The Treatment of Ectopic Pregnancy; W. H. Wathen, M.D., Louisville, Ky.

Laparotomy in Extra-Uterine Pregnancy; Waldo Briggs, M.D., St. Louis, Mo.

Epithelioma of the Penis, with the Report of a Case; D. W. Yandell, M.D., Louisville, Ky.

Laparotomy in Intestinal Obstruction; C. Kollock, M.D., Cheraw, S. C.

An Experimental Study of Intestinal Anastomosis; Jno. D. S. Davis, M.D., Birmingham, Ala.

Operative Interference in Ascites; Hugh M. Taylor, M.D., Richmond, Va.

Observations Pertaining to Pregnancy and Parturition; W. Duncan, M.D., Savannah, Ga.

Puerperal Convulsions; Jno. Herbert Claiborne, M. D., Petersburg, Va.

Some Remarks Upon Aneurisms, Relating More Especially to their Surgical Treatment; F. T. Meriwether, M.D., Asheville, N. C.

Coccygodynia and Its Treatment; Hunter P. Cooper, M.D., Atlanta, Ga.

The Improved Cæsarean Section versus Craniotomy; W. D. Haggard, M.D., Nashville, Tenn.

Conservative Surgery in Injuries of the Foot; J. T. Wilson, M.D., Sherman, Texas.

Gunshot Fractures of the Femur; Jno. Brownrigg, M.D., Columbus, Miss.

Tropho-Neurosis as a Factor in the Phenomena of Syphilis; G. Frank Lydston, Chicago, Ill.

Trophic Changes Following Nerve Injury in Fractures, with a Report of two Cases; Wm. Perrin Nicholson, M.D., Atlanta, Ga.

Treatment of Malignant Diseases of the Rectum; W. T. Briggs, M.D., Nashville, Tenn.

TITLES OF PAPERS NOT DETERMINED.

W. L. Robinson, M.D., Danville, Va.; W. B. Rogers, M.D., Memphis, Tenn.; L. S. McMurtry, M.D.; E. P. Beall, M.D., Fort Worth, Texas; E. Burke Haywood, M.D., Raleigh, N. D.; Paul B. Barringer, University of Virginia; J. F. Y. Paine, M.D., Galveston, Texas;

The Achievements of Modern Surgery; J. Ewing Mears, M.D., Philadelphia, Pa.

The Treatment of the Pedicle in Supra-Pubic Hysterectomy; Wm. M. Polk, M.D., New York.

Some subject pertaining to Abdominal Surgery; Joseph Price, M.D., Philadelphia, Pa.

SELECTIONS.

LEPROSY AND SYPHILIS.

No malady has a more curious history than leprosy, and nothing in that history is of greater interest than its possible relations to syphilis. Even in modern times there have not been wanting men of weight who have upheld with Simon the view that the venereal disease is in some way derived from the older malady. For the following facts still remain unexplained.

Throughout the middle ages, until the end of the 14th century, and especially during the crusades, leprosy was endemic throughout the civilized world. No country escaped its ravages, and historians tell us that in England alone, with perhaps one-tenth of its present population, there were over five hundred houses devoted to the care of sufferers from this malady, and called leprosaries or lazar houses. Numerous religious orders, male and female, devoted themselves to the care of the unfortunate sufferers. It was universally believed to be contagious, and the leper was avoided by society and forcibly segregated. There is no doubt that this chief scourge of Mediæval Europe, which caused hundreds of thousands of deaths, was the same malady as that which we now call leprosy.

With the beginning of the 15th century leprosy began to abate; the notices of it in contemporary writers became fewer and fewer; the lazar houses emptied and disappeared. As mysteriously as it arose leprosy vanished from amongst civilized society. So completely did it disappear that the disease itself became a myth, and was practically rediscovered in Scandinavia in the forties by Boeck and Danielssen.

But a new and even more formidable malady arose in its place. First noticed among the soldiers in the hostile camps at Naples; the French called it "*le mal de*

Naple," and the Italians called it "*le mal Francaise.*" Finally the onus was laid upon shoulders which were unable to repudiate the burden, and this new plague was supposed to have been brought upon suffering humanity from America by the sailors of Columbus.

Syphilis spread like wild-fire throughout Europe in the 16th century. "From the Emperor on his throne," says a contemporary writer, "to the lowest civilian in Christendom, none is exempt." The low state of morality then prevalent, together with the unhygienic and dirty habits that were universal, sufficiently explain its spread. The soil was a virgin one and the malady raged with a virulence and a universality utterly foreign to it to day. Gradually it wore itself out, and became the comparatively mild affection that it now is.

Meantime leprosy had apparently vanished from the face of the earth. But when in the latter part of the 18th and the first half of the 19th century syphilis had begun to abate, leprosy reappeared. First found in obscure corners of Europe and Asia, it has gradually spread abroad again. It is spreading now as sure as syphilis is abating in a syphilized population. Whereas twenty years ago, Hebra could specify individual cases of Lepra observed in this or that country by this or that observer, it is safe to assert that there is not a great city in the world to day that does not contain its cases of leprosy. Is it possible that a malady that almost perished from inanition in an exhausted soil may start afresh when that soil has lain fallow, or has had other crops for several generations?

It does not seem probable that there is any etiological relationship between the diseases. But the history of their occurrence and prevalence forms a chapter of rare interest to the student of disease, and a promising field for future investigators.—*Int. Jour. of Surg.*

THE HEREDITARY FACTOR IN ALCOHOLISM.

To the thoughtful medical man, who is at the same time engaged in philanthropic work, it must often be a source of encouragement when he reflects that few if any of our schemes for amelorating the condition of our fellow men do more than touch the surface of the evil attacked, leaving their obscure and deep-seated causes to go on producing a like train of ills entirely uninfluenced by our efforts. Someone asked Dr. Oliver Wendell Holmes if it were not the fact that every disease could be cured if the doctors were called early enough? "Yes," he replied, "but early enough would commonly be two hundred years in advance." That Moorish doctor spoke like a philosopher when he prayed: "Oh God, be kind to the wicked! Thou hast been sufficiently kind to the good in making them good." We must all have sometime wished that the human race could be propagated with as much care as breeders bestow upon horses and cattle; and no thinking man of our profession can contemplate without pain the marriage of consumptives, syphilitics, neurotics, or drunkards. Especially terrible appears from recent researches, is the part played by alcoholism in heredity.

The *Progres Medical* has done the medical profession at large good service by publishing M. Paul Sollier's Aubanel Prize Essay on the "Role of Heredity in Alcoholism." A more suggestive study for the physician, and a more saddening one for the philanthropist, it would be difficult to imagine. Here is original sin in terms of modern science,and the punishment threatened in the decalogue to the "third and fourth generation" is exhibited at work in perhaps its most terrible form. By abundant and well arranged statistics M. Sollier traces the afflictions of the idiot, the epileptic, the imbecile, the hydrocephalic, the choreic and the mentally debilitated, up to the alcoholic father, mother or grandparent, in so many and such clearly marked instances that it is quite impossible to deny his conclusions from the data he gives. "Conception in a state of drunkenness of the father or the mother devotes the individual conceived to a condition so profound (idiocy, complicated frequently by epilepsy, hydrocephaly, microcephaly etc.), so that it is condemned in general to a very short existence." An alcoholic subject runs a terrible risk of conferring upon his descendants either insanity or tendency to vice or suicide or hysteria, the milder nervous disorders. The legacy of evil may miss a generation, and then appear in the next like gout. It will generally manifest itself, if it appear in the form of dipsomania, in a taste for the same liquor as that preferred by the ancestor, and in its mildest form it will tend so to predispose the unhappy descendant to the evil of ebriety that he will find the freedom of his will in that direction seriously imperilled. The menopause more even than pregnancy seems with women a determining cause of alcoholism. Or its terrible influence may first be manifested after some nervous shock, in sickness, or with advancing age. Hereditary alcoholism has a certain likeness to dipsomania, and it is a fair ground for question whether such a proved condition does not constitute irresponsibility.—Ed. *Brit. Med. Jour.*

ANTACIDS IN DYSPEPSIA AND GRAVEL.

Sir William Roberts, in opening the Therapeutic Section of the British Medical Association, said that there were few simpler problems than those relating to the palliative treatment of acid dypepsia and the chemical prophylaxis of uric acid gravel, but there were some practical points in carrying out the treatmeut which were neither simple nor well known. Antacid agents mights be classified into those which were designed to take effect in the stomach, or gastric antacids; and those which were designed to take effect in the kidneys, or renal antacids. The gastric antacids in common use consisted of the alkaline and earthy carbonates and lime-water. Renal antacids combined, in addition to these, the acetates and citrates of potash and soda, which were changed in the primæ viæ into carbonates of the bases.

Gastric antacids were employed in two distinct classes of cases—namely in acid dyspepsia and in a variety of conditions characterized by great irritation of the stomach, often with vomiting, which we sought to allay by the administration of milk mixed with lime-water. For acid dyspepsia the lozenge was the best mode of administration of an antacid. The Pharmacopœia had two lozenges of this kind, the troch. sod. bicarb. and the troch. bismuthi. The latter was to be preferred. It owed its antacid properties to the chalk and magnesia which it contained, the bismuth being probably inert. Many lozenges sold in the shops contained pungent spices which were injurious. The Tichy lozenges were valuable, but rather costly. It was well to vary the antacid from time to time.

The question might now be put, Is there any harm in the practice of habitually using antacids for the relief of acid dyspepsia? He had naturally at one time regarded the practice with misgivings, but a more extended experience had led him to believe that it was harmless. He used the bismuth lozenge largely, but with the following precautions. They were not to be used at or near meal times; they were not to be used regularly or systematically, but only when gastric pain was present and produced real discomfort; lastly, the use of the lozenge was to be discontinued if it failed to cut short the pain. Lime-water and milk was a favorite remedy, and often very successful. It sometimes failed, owing to the very slow saturating power of lime-water. It was often desirable to substitute a solution of from five to ten grains of bicarbonate of soda per ounce for the lime water.

The use of renal antacids rested on an equally rational basis. To prevent uric acid gravel forming we had only to keep the urine alkaline; but simple as this was there were some practical difficulties in the way, owing to the persistence of the tendency to the uric acid formation. It was very important to remember that this tendency did not last throughout the entire twenty-four hours, the necessary conditions being only present during the hours of sleep. It followed that if we safeguard the night the day might generally be left to take care of itself. In the milder cases a full dose of the alkalizing agent at bed-time was sufficient. The citrate of potash was the best preparation. The dose for an adult should not be less than from forty to sixty grains, dissolved in three or four ounces of water. In severe cases a second dose should be taken about the middle period of the hours of sleep. In still more severe cases additional doses might be required, but usually only temporarily. The essential point in the prophylactic treatment of uric acid was to guard the urine from precipitating within the precincts of the kidney. An antacid which was too feeble to render the urine actually alkaline might postpone the time of precipitation.—*Lancet.*

Treatment of Hydrarthrosis of the Knee by Subcutaneous Rupture.—One of the most troublesome of all forms of articular dropsy to treat satisfactorily is chronic serous effusion of the knee. Why this is so is not so easy to explain, possibly it is because the effusion in this joint is apt to be greater than elsewhere,so that the lymphatics are unable to receive it with sufficient rapidity. However this may be, it is a fact that it is often impossible to disperse the fluid without recourse to operation, and despite the comparative safety of operations on the articulations as practised in our day, it is nevertheless better to avoid even a puncture with an aspirator needle, if possible.

As a substitute for aspiration or a cutting operation in cases of hydrarthrosis of the knee which have resisted counter-irritation, pressure, etc., Dr. George Berne, of Paris, proposes subcutaneous rupture of the synovial membrane (*eclatement*), so as to promote the escape of the fluid into the surrounding tissues (*L'Union Medicale*, August 6, 1889). Examination of a knee-joint containing much fluid shows that fluctuation is most apparent at the upper and inner part, and if the joint be semi-flexed the distended synovial sac will form a very distinct prominence in this situation. Dr. Berne's plan is to render this portion of the sac very tense by making upward pressure over the joint with the palm of the hand, so that a constricted neck is formed between the inner condyle of the femur and the concave border of the hand. The sac being thus rendered very tense, firm pressure is made upon it by the thumb of the constricting hand, or it is tapped somewhat sharply by the ulnar border of the fist of the other hand. By this means the synovial membrane is rent, and an escape of fluid takes place into the neighboring cellular tissues, where absorption readily takes place, owing to the abundant supply of lymphatics in that region. Resorption of the fluid is further aided by massage practiced after rupture of the sac.

Dr. Berne has never seen any bad effects follow this procedure, and he recommends it especially on account of its safety and of its ease of execution. The method is, howeuer, applicable only to comparatively recent cases, in which no marked thickening of the synovial membrane has taken place, and in which no evidences of inflammatory action are present.—*Med. Rec.*

The Art of Eating.—There is little if any doubt that cooking has been employed by man in the preparation of food from the remotest ages. It is probable also that empirical ideas of what conduces to comfort in diet early formed the basis of gastronomic art not without some relation to physiological truth. It has been reserved for later times, however, and for civilized man, to discover and formlate a regular method of dining. By a process of natural selection the work of elaborating this system has, in a great measure, passed into the hands of our French neighbors, who have thus been able to develop an art characteristically their own. Our simpler national customs relating to the table have, in common with tho e of most other peoples, attracted less

attention, though it is not likely that they will ever disappear. It is needless here, however, to discuss in detail each local peculiarity. We should rather aim at understanding those common principles which underlie all rightly constituted systems, and give to each its value as an aid to wholesome nutrition. The time of eating is a matter of no small consequence. This is to some extent subject to individual convenience, but we may take it that as a general rule not less than five hours should separate one meal from another. The short interval of rest usual after meals will commend itself as being in strict accordance with physiological necessity. The quantity and quality of food taken also require careful attention, and these again must be regulated by reference to the work to be done by a given person. Some difference of opinion has always existed as to the proper daily allowance of meat. We shall probably do justice to the digestive powers of most persons, however, by advising that only one substantial meat meal be taken daily. More than this would tend, if continued, to overload the tissues with digestive products, and less would hardly suffice for full nutrition. Drink, if alcoholic, should be sparingly taken, or not used at all. Cookery has in these days been elaborated almost to excess. Variety and delicacy are carried to an extreme, and we should probably gain rather than lose if plainness combined with care were adopted as our rule of practice in such matters.—*Lancet.*

Removal of Moles by Electricity.—If the growth is the elevated, warty mole, its removal by electricity is admirable. The brown pigment mole may also be destroyed in this way, but it is not quite as clean cut an operation. With the warty mole, I inject into it a few drops of four or six per cent cocaine, and as soon as it is benumbed I transfix the growth at the base, exactly on the level of the adjacent skin, the needle having previously been connected to the negative pole of a galvanic battery. I use about eight milliamperes current, equivalent to about twenty cells of a thirty-six cell battery, if in good condition. One could use from twelve to sixteen, or even twenty cells. The positive sponge electrode may be held by the patient in the hand, unless the current would pass through the eye, when a small sponge electrode must be pressed upon the face at some point that would avoid this objection.

Very soon after the current is completed, bubbles of gas pass out along the points of entrance and exit of the needle, and the mass becomes blanched. Hold the needle there half a minute to a minute. Transfix again at right angles, taking care to interrupt the current by taking off the sponge electrode before the needle is withdrawn, and also taking care to introduce the needle again before completing the current. If the mass is very large, or is very fibrous, transfix a half-dozen times at different points, but always on the exact level of the skin adjacent. In this way a layer of dead tissue is formed by the electrolytic action of the current, at the base of the mole, and on the level of the skin. The main mass dries down,and dies from lack of nourishment, and in five or eight days drops off, leaving a smooth, pink spot, which, in a month or so, will fade away almost entirely. The mole dries down into a dark crust before dropping off.—Hoyt, *Colnmbus Med. Jour.*

Sir Spencer Wells on Cremation.—The London *Lancet*, June 8, 1889, says that Sir Spencer Wells deserves credit for the pains he takes to disseminate a knowledge of the arguments for cremation in Great Britain, and the success which this method of disposing of the dead meets with. It is impossible to deny the strength of the arguments in favor of cremation as a most effective and prompt way of reducing the body to its mineral elements, which process the *Lancet* says, can be carried out now at Woking at the small cost of ten shillings per body. Sir Spencer Wells argues that, however light the covering of the dead body, its burial in earth is objectionable, for the reason that infective germs are in this way perserved and carried about by water or air, to operate injuriously when favorable meteorological or social states occur. The rapid growth of population, and especially of urban populations, due to a greater prevalence of peace and a more satisfactory sanitary system, invests this question with ever-increasing importance. The religious objections have been completely answered by men like Lord Shaftesbury and Bishop Fraser. There is evidence that the number of cremations is increasing in Italy and England, as in the week preceeding Sir Spencer Wells' speech there had been three cremations at Working; while in Italy, in the three years 1886, 1887 and 1888 there were 109, 155, and 202. Dr. Parks thinks that for maritime nations much is to be said for burial at sea; but we are a long way off such a solution of a very serious question, which strangely underates the sentimental objections.—*Med. & Surg. Rep.*

The Curability of Cirrhosis of the Liver.—In a lecture delivered some time ago at the University of Naples, Professor Semmola called attention again to his method of treatment of cirrhosis of the liver, which he had first proposed in 1879 at the Amsterdam Congress, although he had suggested the possibility of curing the disease ten years before that time. The method is a very simple one, and consists in the enforcement of a pure milk diet, no solid food whatever being allowed. By this diet, he claims, nutrition is sustained, while the least possible work is put upon the digestive organs, and it is upon this physiological rest that he relies for a cure of the beginning cirrhosis. It is, of course, only in the earlier stages of the disease that a cure can be expected, that is during the stage of interstitial hepatitis, before atrophy of the organ has advanced.

In this connection,the lecturer took occasion to inveigh against too great a devotion to pathology, which tended,

he thought, to promote pessimism in therapeutics. At the post-mortem table interstitial hepatitis is generally found in its atrophic stage, when the newly-formed tissue has become fibrous and contracted, and when no hope of cure can be entertained. One who has such a picture always before his mind, as the interpretation of the early symptoms of the disease, is not encouraged to treat the affection to the end of affecting a cure.

Professor Semmola reported several cases in which the symptoms pointed to an early stage of hepatic cirrhosis, and in which a cure was obtained by means of a rigid adherence to a milk diet without solid food or drugs.—Ed. *Med. Rec.*

Living Twins with One Body.—Dr. G. M. Collins, of Tipton, Ind., writes: "On Monday night, June 24; 1889, was born to Mr. and Mrs. J——, near Groomsville, Tipton County, Ind., a pair of twin girls with one body. They unite in centre of the body, having but one umbilicus. There are two legs on either side of body. The two children are well formed, and at this writing have every appearance of living. There is a well formed vagina and anus on either side, between each pair of legs. The two anuses are about one and a half inches apart. Each child has a separate circulation and organism. One will sleep while the other is awake. One leg on each side of the body belongs to each child, that is the same as if two children were lying on their backs with their coccyges in contact, except that the legs are on the sides. At birth their weight was twelve and one half pounds, and they were twenty-two and one-half inches in length. The bowels and kidneys perform their functions independently. At first the children could bend up and both nurse at once, but now they are developing and do not bend so readily, and one nurses at a time. The spinal column is straight and the two seem to be united at the end of each body. The children are bright and lively, have a fine head of hair and fine features. Their mother is of slender build, and weighs about one hundred pounds."—*Med. Rec.*

Natural Electricity.—An extraordinary tale comes from Burmah. Mr. Ronald H. King, an electrician well known to the Burmese, while on a prospecting and shooting expedition in the Island of Labuan, is said to have discovered a mineral from which electricity can be obtained without apparatus of any kind whatever. The mineral is described as being in the form of a black stone of excessive hardness, and very great specific gravity. being nearly as heavy as platinum. A small block in the shape of an irregular cube, measuring 4.3 inches one way by 5.2 inches the other way was brought away, and on bringing it into the testing room a strong effect was noticed upon the galvanometer. At first it was thought that the mineral was an ordinary loadstone, but on tests being made it was found that the force was more akin to that of an electro-magnet and that a strong current would flow when the mineral was connected in a circuit. Further tests revealed that a difference of potential of forty-seven volts could be detected at the extremities, the internal resistence of the mass being twenty ohms. The block appears to waste away very slightly, leaving a slight gray powder upon the surface when connected up for some time. The electrician now uses the block to light a couple of incandescent lamps in his laboratory.—*Times and Register.*

Salicylic Acid in the Treatment of Malignant Scarlatina.—Dr. Shakowaki writes in the *Revue Mensuelle des Maladies de l'Enfance* that he has administered salicylic acid with the greatest success in one hundred and twenty-five cases of grave scarlatina occurring in children, the mortality being reduced to three and one-half per cent. Ordinarily his method of administration was in the form of a mixture consisting of one part of salicylic acid to 75 parts of water, and 30 parts of syrup of orange-peel, a teaspoonful of this being given every hour during the day and every two hours during the night. He writes that under the influence of this remedy the temperature is rapidly reduced, in certain cases even at the end of forty-eight hours, the temperature falling four degrees. Habitually all traces of fever disappear after the tenth day of the disease. Nevertheless, the author advises to prolong the treatment for some time longer than this in progressively decreasing doses, so as to avoid any danger of relapse. Through the use of this remedy the author believes that he has avoided the most serious complications of scarlatina, such as uræmia, anasarca and diphtheria. He claims that this medication will only be ineffectual when given too late, —that is, after the fourth day of the disease, or when there exists some grave chronic complication.—*Therapeutic Gaz.*

Incisions in Atonic Callous Ulcers of the Leg.—Dr. Ivan A. Praxin (St. Petersburg) warmly recommends a simple method of treatment successfully practised by him in atonic crural ulcers with sclerotized edges. The method consists in making multiple dry radial incisions, penetrating through the whole thickness of the edge, and situated so that the inner third of each incision divides the granulating bottom of the ulcer, the middle one its edge, and the outer third the adjacent healthy skin. The distance between the incisions should be equal approximately to two or three breadths of the edge. To secure gaping, plugs should be inserted into each wound for a few days. When treated after the plan, callous ulcers, varying in size from a penny piece to a half of the palm, are said to heal as swiftly as any simple ulcer, provided their neighborhood is free from inflammatory œdema and venous congestion.—*Transactions of the Third General Meeting of Russian Medical Men at St. Petersburg*, No. 8, 1889.

ORIGINAL ARTICLES.

A SIMPLE METHOD OF TREATING FISTULA IN ANO.

BY JOSEPH M. MATHEWS, LOUISVILLE, KY.

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Read before the Mississippi Valley Medical Association, at Evansville, Ind., Sept. 10, 1889.

Perhaps a better caption for this article would be, the Treatment of Fistula in Ano, inasmuch as it will be necessary for me to mention the several accepted methods of treatment in order to contrast, or show the advantage of the simple method which I shall speak of in the few selected cases in which it can be used. Fistulæ in ano are as varied and different in their pathological conditions as any one surgical affection can be. For instance, a sinus may exist just underneath the skin, extending but a very little distance, and causing but little if any disturbance; again, sinuses may be so extensive as to completely undermine the sphincter muscles, causing great destruction of tissue, progressing rapidly, and so effect the general constitution by the waste and nervous disturbance as to render the patient a complete invalid. Both of these conditions receive the same appellation, viz: Fistula in Ano. To say that the same method of treatment is applicable to both, would be preposterous, and yet it is no uncommon thing for us to read in reputable medical journals, prescriptions for the cure of fistula, or as might be properly objected to, this caption "A Simple Treatment for Fistula in Ano;" hence I have been explicit in saying that the method depends upon the case.

It is not the intention of the paper to deal with the etiology of the disease, but simply to discuss the methods that have been proposed and are practiced for its radical cure. From time immemorial the knife has been used as the means *par excellence* for the treatment of fistula, and I might add that from time immemorial, has the laity fought this practice; the charlatan has ever been ready to play to it and has done so in his pretentious and deceitful way. I believe that every surgeon here will agree to the statement that it would be impossible to cure the larger proportion of fistulæ without the cutting operation. I can safely say that whenever other methods such as caustics, ligatures, etc., are brought in competition with the knife as an agent of cure in surgical affections, the preference must be given the knife.

It has always been a mystery to the profession why sensible patients would consent to have tumors etc., burned out by degrees in preference to a rapid extirpation with the knife. It is the story of the dog's tail being cut off by piecemeal to avoid giving it pain. It might be said that we of the profession too often succumb to the whims and caprices of patients, often allowing them to dictate the means of cure. That the cutting operation is the one to be preferred in the majority of cases of fistula, is easily understood by those familiar with the disease. Let me illustrate: If an abscess in the ischio-rectal fossa has left a sinus which runs directly into the bowel, and from this a branch fistula runs toward, or up the perineum, nothing save a free division of the trio would effect a cure. Add to this that many fistulæ have branch sinuses, some running laterally, others dorsally, or to the front, and others again burrowing up the bowel, none such could be curred save by a cutting operation. How often is it that the surgeon is disappointed by the wounds refusing to heal after an operation for fistula, and an investigation proves that it is due to the existence of a small sinus or pocket that had been overlooked. I am sure after a long experience that in the majority of case operated on, if a single sinus is left, that a good result will not be obtained. In other words, the inflammation excited will not be sufficient to eradicate the branch fistula. The flaps or thinned edges alone, if left, would prevent good union.

A case: Mr. L. F. S. had submitted himself for treatment to an advertiser who claimed not to use the knife, caustic, or ligature etc., in the cure of fistula. He had been under constant treatment for eleven months, when he discharged his surgeon and consulted me. Upon examination I found five long and deep cuts into the buttocks, evidently made by ligature, from which was oozing a large amount of pus, the wounds showing no disposition to heal. The edges of the wounds fell into the cut surface and were a great source of irritation. Inserting my finger into the rectum, I found an opening about an inch above the sphincter muscle which connected with a large sinus running high up in the perineum. The patient was put under the influence of chloroform and this sinus—which was the original one, was freely divided; several additional branches were traced and treated in the same manner. All the edges were trimmed thoroughly and the wound dressed. He made an uninterrupted recovery and was discharged in three months. This case clearly demonstrates two propositions: (1) that if additional sinuses are left, a cure will not be effected; (2) that anything less than a free cutting operation would not have effected a cure.

Very great prominence is given by some authors to elastic ligature, as a means of cure for fistula. I must confess that the more I use it the less I am pleased with it. The cases in which it can be recommended are very few and must be selected with care. No surgeon wishes to do his work over the second time, yet this is sure to be the case very often if the elastic ligature is used indiscriminately. If, as I have asserted, and can easily demonstrate, the laying open of a main sinus will not eradicate additional or branch sinuses, how can the ligature effect a cure if there be others communicating with the main fistula? Again, there is a toughened and indurated condition of the walls of the fistulous track; the ligature of course cuts through the top portion, leav-

ing the bottom untouched. Mr. Salmon often said if the bottom of a long-standing fistula was not divided it would be impossible to establish the healing process. He was therefore in the habit of drawing his knife across the bottom of the sinus, and it is known at St. Marks today as the "back cut" of Mr. Salmon. I say therefore, that there are four conditions either one of which if existing should prevent the use of the ligature.

1. Where more than one sinus is known to exist.

2. Where the fistula is of long standing and the walls of the sinus are undurated.

3. Where the general appearance of the parts indicates a flabby condition, which would cause the edges of the wound to be a source of irritation.

4. In case of *horse-shoe* fistula the ligature should never be used.

It was an old method to try and heal fistulous tracks by injecting different agents into them. Iodine, carbolic acid, nitrate of silver, etc., have been used for this purpose. With modern surgeons, the plan is nearly obsolete, a proper gauge cannot be put on the agent used.

If too little iflnammation is excited, no good is done—if too much, great damage may result. One effect in the hands of the charlatan has been the healing of the external opening of the fistula and the convincing argument made to the patient that a cure was made; in a short time the patient finds himself in a worse condition than ever, because of the confinement of the pus.

There are other methods of cure for fistula in ano which I will not take your time to discuss, but rather confine myself to the consideration of two complete methods. Some months ago a surgeon of distinction in the United States reported several cases of fistula that he had operated on and secured union by first intention.

The operations were done under antiseptic precaution, and the cut-edges brought into apposition. I have reported five cases so operated on, to the local societies in Louisville; four in which the success was perfect, in one the wound refused to heal.

I suppose the originator of the idea (I regret that I cannot recall the name) would admit that the method can be applied to only a few select cases. If much cutting has been done, as in the case of many sinuses, or if cavities exist, it would be impossible to get apposition, hence the operation would be impracticable.

I have taken from my record the last case operated on in this manner.

Case: Dr. M. had an external fistulous opening about five inches up the back, a little to the left of the sacrum. The sinus ran down towards the coccyx and dipping over it entered the rectum by the lower edge of the sphincter muscle. Examining carefully for indurations that would indicate other channels and finding none, I freely divided the whole sinus, scraped the bottom with a small scoop, drew the parts firmly together by the use of both superficial and deep sutures, sprinkled freely with iodoform, and spreading the gauge over the parts, applied the bandage, which I did not disturb for ten days.

At the expiration of ten days I renewed all dressings and found the wound entirely healed. I shall continue to use this method in the selected cases that I have indicated and believe that much credit is due the surgeon that recommended the plan.

Several years ago I read a paper before the Kentucky State Medical Society suggesting what I was pleased to call, "A New Operation for Fistula in Ano." It was described in the following words:

The plan is this: Taking the ordinary exploring probe, it is inserted into the external orifice of the fistula to determine, if possible, that only one sinus exists. Being satisfied of this fact, I then take a long, slender laminaria tent and push it gently into the fistulous sinus to the fullest extent that it will go. This is allowed to remain for several hours, keeping the patient under observation during the interim, at the end of which time it is withdrawn. The procedure causes but little if any pain. The laminaria tent is preferable to the sponge for the reason that it furnishes its own moisture, which assists in its withdrawal. After this dilatation I take a urethrotome with a small point; closing the instrument tightly, it is pushed gently as far into the sinus as it will go, and then, by the aid of the screw attachment I dilate the sinus. When this is done, the turning of the screw at the side of the instrument will cause the concealed knife to protrude at the distal end according to the measurement desired. The instrument is then carefully withdrawn, cutting through the wall of the sinus throughout its whole length. The cut, as will be perceived has been made cutaneously, and the pain is insignificant. What hemorrhage takes place is easily controlled by pressure. In several instances I have turned the instrument and reinserted, practicing the same procedure upon the opposite side, at one sitting. If this is not thought advisable, the patient is allowed to go for several days before repeating the operation, which is to include the other side. The advantages that I claim for the operation are, viz., over the injection plan it must take precedence, for the reason, as above stated, that the injection of any agent that is commonly used for such purpose does not accomplish what is desired. The sinus is lined by a thick membrane which will, in many cases, resist the action of said agent; hence it is impossible to get healthy granulations. With this instrument both the top and the bottom on each side, if necessary, can be cut through, thereby insuring a good granulating surface, and this too, without pain. Over the ligature, either elastic or non-elastic, it possesses the advantage of cutting through the top and bottom, or each side of this thick membranous sinus, while the ligature cannot possibly go through any portion but the top of the sinus as it cuts its way out, leaving, of course, the callous bottom, which in many cases would refuse to heal, it being a positive rule in surgery in the operation for fistula, established by Mr. Salmon, that the bottom of all these tracks must be divided to insure a cure.

In the operation with the instrument, the muscle is not

divided or interfered with. Over the knife it can be claimed (1) that this opperation dissipates all horror in those patients that dread the knife; (2) that excessive hemorrhage is avoided; (3) the sphincter muscles are not cut; (4) the patient is not confined to bed or taken from business; (5) the tissues are not cut. In the majority of cases which I have treated by this method, I have done so without their knowing that anything in the nature of an operation had been done. Exhibiting the instrument to them, the knife being concealed in its case, they have never known other than that it was a a probe. If I find, after waiting a few days, that sufficient depth was not reached, the instrument is again inserted and the same procedure practiced. The patient is kept under observation a sufficient length of time to be assured of a perfect cure. Where pus cavities are found, or many sinuses exist, of course this operation is not advised, but in the selected cases mentioned, I am sure that the advantage claimed for it will be realized. A score of cases in my practice attest its value. I encountered many disadvantages in operating upon the fistulous track with the urethratome. 1. It was too large to enter the orifice of the sinus and recourse was had to the laminaria tent. 2. It only cut upon one side, hence required a second introduction to effect a division of both the top and bottom of the so-called pyogenic membrane. To meet these difficulties I had Lopel make for me a modest little instrument which I present for your consideration, and which for a better name I call a fistulatome. You will observe that it is very small, but a little longer than a good sized probe. It has within it two concealed knives. It is probe pointed, hence easy of introduction. In the end is an islet which I sometimes thread with a filiform, the object being to search out or enter any small branch that may exist. When the instrument is pushed to the very bottom by the screw arrangement at the distal end both knives are uncovered at once. They are of sufficient length to cut entirely through the indurated membrane. Patients very seldom complain of any pain. In a few cases I have injected mur. cocaine into the sinus and have then done the operation. I shall recite only one case out of many so operated on.

Case: Mr. B., a mechanic referred by Dr. Anderson. After an extensive fistula with a number of branches, had to be laid open and all wounds healed, I discovered by examining, that a small orifice existed at the original site. Introducing a probe, I found that it entered fully six inches, a superficial sinus that I had evidently overlooked in the operation. Tne fistulatome was introduced, the knives uncovered, and the instrument withdrawn; a little bleeding occurred, some soreness was complained of, and at the end of a week no sinus could be discovered.

I want to be explicit in saying that the cases in which this little instrument will prove of service are limited, and yet I do believe that any fistula that could be cured by the ligature, elastic or non-elastic, can be cured, for reasons already named, by this instrument, and that it will be found of more service than some other methods that have been recommended. I am now having an instrument made of the same size and after the same device, which carries four knives instead of two. It has occurred to me that the freer the division of the wall is, the more satisfactory will be the result.

CLINICAL MORPHOLOGY VERSUS BACTERIOLOGY, WITH SOME THERAPEUTIC DEDUCTIONS.

BY JOHN ASHBURTON CUTTER, M. B., B. SC., NEW YORK.

Read before the Mississippi Valley Medical Association, and Illustrated by lantern slides of Microphotographs, Sept. 11, 1889.

WHAT IS CLINICAL MORPHOLOGY?—Morphology is the science of form. Clinical morphology covers the form elements that the clinician sees in his daily work with his patients; the position in bed; the lines of the face; the attitude assumed in walking and sitting; all come under the term clinical morphology, but for our purpose to-day, we will consider clinical morphology to be the description of the form elements found in the blood, the urine, the sputum, the skin, the feces and foods.

WHAT IS BACTERIOLOGY?—The science of bacteria. What are bacteria? Very small bodies which are hard to place. They have been classified under the heading of schizomycetes of the confervoid algæ. A good definition of algæ is, that they are plants that produce oxygen, and of fungi, that they produce carbonic acid gas. However, I do not care to go into this part of the subject for there must yet be a great flood of light thrown on this matter. My aim to-day is to show you that bacteriology as a means of diagnosis and of course of therapeutics is very weak as compared with clinical morphology.

For over twenty years my father, Dr. Ephraim Cutter, has been laboring to bring the original investigations of Dr. J. H. Salisbury before the profession, his aim being to save them for its use. In one way this has been a mistake, for in writings, much has been said about the so-called Salisbury plans; however, he has good company in such a mistake, for medical nomenclature is filled up with this and that man's operation and even anatomy and physiology have to have some one's name tacked on; nomenclature can better describe in some instances an operation or a function or a tissue, by some man's name. But the profession of medicine does not stand on any one man's work; he may be a pioneer but no good will be done unless others come in and corroborate what he is right in and show his mistakes. The word morphology was first used in publications over ten years ago in its relations to medicine by my father, though the clinical morphology of the blood, sputum, etc., had been employed for twenty years previous to that time.

To-day I wish to oppose bacteriology and clinical

morphology and give you as good a demonstration as time will allow of what it has been my good fortune to see, trusting you will be patient with me when I say that I realize the kindness of men much older than I am in listening and witnessing my demonstration.

We proceed to the concrete side of our subject, and will consider briefly the much advertised infant's foods, asthma, rheumatism and tuberculosis.

Infants' Foods.—It will go without saying that bacteriology has little field of work in infants' foods. Yet the opportunities offered for clinical morphological investigations are great and of much importance. Take for instance, "Imperial Granum;" the author of the clinical morphologies showed years ago that, though the claims of the manufacturers were that this preparation was "amorphous, a solid extract, the salvator of the human race, etc.," it was decidedly morphological, containing starch grains, to say no more, and the Connecticut Agricultural Experiment Station has backed up the statement of the morphologist by chemical examinations which show that "Imperial Granum" is common flour.

Any physician who has an infant food sent him for examination should not rely wholly on the chemical examination made by reputable chemists and not at all on the statements of the proprietors; place the food under the microscope, study for gluten cells, starch cells, cellulose, the connective tissues of the various grains; see if it is an amorphous, homogeneous mass or made up of decidedly morphological elements. A food may be a first class one chemically yet contain so much cellulose, that it is unfit for the stomach. The paper published in 1882 in Gaillard's *Med. Jour.*, on "Cereal Foods" by E. Cutter, illustrated by many cuts of micrographical drawings, created much attention as being the first to enter a new field as to foods, to-wit: the morphological; chemistry and clinical morphology should go together.

The therapeutic deduction is: Feed the mothers during gestation and lactation on such food that they will have milk enough to nurse their children, summer or winter. Our plan is, two-thirds animal and one-third vegetable, with one meat and one vegetable at a meal. I confined a young woman in March with her second child. The mother weighed 95 pounds; the babe, ten. One-half hour after the delivery of the placenta, the mother ate a good meal of beefsteak and a small portion of bread. A few weeks ago I heard from her, that this second child, which she called the "meat-baby" had done much better than the first; that she had plenty of milk for it and was in good health. The mother and child reside in New York City.

Morphology of the Sputum in Asthma.

The following in quotations is from the work entitled, "The Clinical Morphologies," by Ephraim Cutter, M.D., LL.D.; published by the author, New York:

"Cholesterin; cystin; oxalate of lime; phosphate of lime; triple phosphates; uric acid and urates; calculi made up of the salts; contents of giant cells escaped outside of walls; crystals with two or more terminals; foreign substances inhaled; fusiform crystals; gravel crystalline, gravel granular, gravel massive.

"Mucous corpuscles distended with albuminoids; with crystalline and other bodies; with cystin; with giant cells; with melanotic matters; with oxalate of lime; with triple phosphates; with uric acid and urates.

"Other crystals whose names have not been made out. Spirilina splendens, Salisbury, 1865."

The therapeutical indication from this morphology in asthma is to feed the cases so that there will be the minimum of fermentation and thus stop the paralyzing action of the carbonic of acid, etc., on the eliminative glands; give tonic and liquefying medicines and if the case is watched closely and will follow the orders to the letter, a cure may be expected in time. It hardly needs to be said that bacteriology is far behind clinical morphology because it can only treat of bacteria, yet clinical morphology is able to show physical causes of the asthma and hay fever.

The Morphology of the Blood.

Mode of Study.—"It is necessary to have the patient, the microscope, the light, the means of withdrawal of the blood—a lancet, spring lancet, the sacrificator of the writer, (E. Cutter) or a needle, which is not the best thing—all together.

"There is no such thing as taking the blood home to examine. The changes are so rapid that most of the important ones disappear in ten minutes time. Still, after these are gone, many valuable points remain to be looked for.

"Kind of Blood.—The capillary—not the venous or arterial.

"Site of Withdrawal.—On the radial or ulnar side of the forearm near the wrist. The skin should be clean and free from soap. If dirty, wash with soap suds or ammonia water. (It is well that the beginners should study the skin surface, dirt and epithelium, before looking at the blood). Take the patient's forearm in the hand, and make the skin tense in the interval between thumb and forefinger. A quick puncture is then made, about one-eighth of an inch deep. The tension of the grip will squeeze out a drop of blood. The size of the drop should bear direct relation to the size of the cover. Very much depends on handling the drop rightly. When the drop evenly diffuses itself, it is presumed that the film is about uniform in thickness, so that one can judge somewhat as to the comparative number of corpuscles in each specimen. The process of transferring the blood should take only a few seconds of time; a fraction should be sufficient.

"Morphology of the Blood in Health.[1]

"Color.—Bright, fresh, clear, strong.

"Clotting.—Rapid and firm.

"Red Corpuscles.—Arrange themselves in nummulations, or are scattered evenly over the field. Normal in size. Non-adhesive. Central depression well mark-

[1]See Clinical Morphologies, E Cutter.

ed on both sides; periphery well rounded, clean cut. Hold coloring matter firmly. Pass readily to and fro through the fibrin filaments; appear fresh and fair.

"White Corpuscles Normal in Size.—Not enlarged by internal collections of foreign bodies. Amoeboid movements strong or not. Proportion, one to three hundred of red corpuscles. Consistence good. Not sticky. Color a clean white. Freely moving at will.

"Serum.—Clear and free at sight from any form. After five minutes, most delicate, semi-transparent fibrin filaments appear, forming a very light network in the field, which offers no obstacle to the passage of the corpuscles.

"There should be no spores nor vegetations in healthy serum, though they may be found by very minute examination, or by letting the blood stand for several days in closely stopped phials at a temperature of from 60–75° F. This is not saying that spores and filaments cannot be found in blood of persons calling themselves healthy—for some diseases exist in a latent condition, like rheumatism, syphilis, cystinæmia and consumption. I have met with people who, on finding vegetations in their blood, have decided not to accept the evidence because they deemed themselves healthy. Again, it is difficult to find a perfectly healthy person in the community; this was made public during the 'late unpleasantness, when drafts were made for soldiers. The blood evidence must be taken in connection with that of other physical signs.

"Morhology of the Blood in Rheumatism.[2]

"Rheumatism may be called the gravel of the blood.

"Color varies from that of health to the paleness of anæmia.

Consistency and rapidity of clotting increased.

"Red corpuscles. Color usually impaired, not always.

"Adhesive, sticky, often drawn out into elongated lozenge-shaped bodies with pointed ends,and sometimes filaments joining with one or more of their fellows.

"Clot in winrows, ridges and huddled masses; sometimes quite formless. This is caused by the massive fibrin filaments holding them fast, as it were, in their firm meshes. The same thing is seen in consumptive blood, but to a less degree.

"White corpuscles usually enlarged; adhesive, sticking to each other and to the red corpuscles, and matters found in the serum. Indeed, it seems to be the office of the white corpuscles so far as possible to swallow and envelop any foreign substance that may find its way into the blood. Thus we find crystalline matters in the white blood-corpuscles in rheumatism, though not always.

"They undergo amoeboid movements as in healthy blood—they have independent locomotion. Disease does not seem to impair their automatic movements.

"Often they are increased in number. If there is fatty degeneration going on, they will be found to contain fat in globules.

"The serum.

"Fibrin filaments in massive, strong and sticky threads, in abundance—in meshes, which are finer than in health, visible plainly—strong and hold the red corpuscles like prisoners—in skeins, like tangled skeins of silk—in masses forming thrombi which, when fastened, form emboli.

"These thrombi are apt to involve and embrace white and red corpuscles and crystalline bodies to be named below. Sometimes the fibrin filaments are found in large round strings, curled up fancifully by the motion of the blood stream, and looking like the mycelial filaments of vegetations, from which they can be distinguished by an absence of entire cylindrical outline—ragged broken edges here and there and dichotomous and polychotomous divisions of the trunk, differing from vegetations of syphilis for example. It is the presence of these fibrin filaments that makes the blood ropy, adhesive and sticky. They have the tendency to block up the blood stream and besides to be locally deposited in the tissues specially when the circulation is sluggish, as near the extremities and the joints.

"Crystalline Bodies, or Gravel of the Blood.—These are numerous and readily recognized; some of them are as follows:

"1. Uric acid and urates of soda.

"2. Phosphates—especially the triple phosphates of lime and soda.

"3. Oxalate of lime.

"4. Cystine. This is quite common and easily detected.

"5. Carbonate of lime, rare.

"6. Stelline and stellurine. These occur mostly in granular form in the serum, but in old cases, where the system is saturated they are crystalline.

"7. Black, brown, aniline blue, bronze, orange, red and yellow pigments in the form of flakes or small masses are common in rheumatic blood, and may be termed gravelly matters that should have been eliminated by the kidneys or bowels or skin.

"Latent Condition of the Characteristics of Rheumatic Blood.—The morphology of rheumatic blood exists in a latent condition in persons apparently well; but when they are exposed to cold, the blood-vessels contract, catch and detain these abnormal elements, and we have a stasis of the blood which may be active or passive and manifests itself in heat, fever, pain, swelling, inflammation or passive congestion, effusion, etc., and which make up what is known as an 'attack of rheumatism.' The fever may result from the effects of nature to get rid of the intruders, just as a house-holder will become hot in expelling from his premises a thief whom it is difficult to remove. Or to use another simili, the attack of rheumatism is like the explosion of a gun. The charge in the gun is the morphology of rheumatic blood, and the cold is the pulling of the trigger. The charge may be latent in the gun for years, but it is there

[2]See Clinical Morpholgies, E. Cutter.

with its potential energy ready to become actual from an exciting cause.

"Fibræmia is where the fibrin is in excess in filaments, skeins, curled massive fibers like strings—thrombi and emboli. These are in a more exaggerated condition and form than in consumption or rheumatism, and are not necessarily associated with the crystalline matters or gravel. Sometimes the fibers look like a scalp that has been taken from the head of a woman with long tresses of hair.

"Thrombosis is where masses of fibrin accrete and consolidate together, including or not the red corpuscles, white corpuscles, crystalline and pigmentary bodies, spores and mycelial filaments or vegetations, one or all.

"Embolism is where a thrombus has been caught or engaged in a blood-vessel and acts as a plug disturbing the circulation.

"Pre-Embolic State.—As thrombi precede emboli, so they can be detected in the blood before the embolism, simply by the morphology of the blood. In this way, sudden deaths from embolism, especially in the puerperal state, can be averted."

Here again we have a subject which bacteriology can not touch, as the morphology of the blood in rheumatism shows the causes of the inflammation, pain and deposits to be purely physical and chemical.

Dr. Asa F. Pattee, of Boston, told us at the last meeting of the American Medical Association that he had had gout for years and accepting the popular idea, he chewed beef and ate vegetable food mainly. Finally he changed his ideas and ate beef largely with the result that his swollen joints are decreasing in size. I see that the English writers are beginning to think that beef does not have so much to do with the cause of gout. Indeed beef has had many sins that other foods should have borne the complaint of, laid at its door. Stop the Englishman from eating his puddings, pastry and sweets and feed him on beef rightly prepared and I think he will have less gout. The morphology of the blood in these old cases of gout is very interesting and beautiful. One case I examined several years ago, had a most remarkable display of crystals of cystine.

A lady has recently come under treatment who had been for three summers at one of the large sanitariums of the West, which is very extensively advertised. All this time no improvement was made in her case; they told her that rheumatic gout was a fiend; was incurable; that milk was a perfect food (though in this case it had clogged up her liver so that it is hard work to get it to running smoothly); that beef was nasty and not fit for man to eat, etc. Her blood was ropy and sticky, molasses like; crystals of cystine and uric acid were present.

In three weeks' time, a finger that she had not been able for three years to flex to the palm, will now touch it.

This case is improving very fast; rarely bloats, whereas she had to buy charcoal continually while in the west, for the gas.

To treat rheumatism, one must be patient; sometimes the cases have to go on very rigid diet; nothing but the beef separated from its fibrin, and the resultant pulp broiled. I wish to say here, that we never prescribe beef raw, never did, and never will.

Each case must be studied for itself. This case in question can eat a little bread with her meat, but potato will immediately bloat her. It takes time to cure these cases and to get their stomachs, livers, bowels and kidneys working rightly. Put the nutrition on a healthy basis, get the blood right and then wait for old Dame Nature to do her work.

[TO BE CONCLUDED.]

REPORT ON PROGRESS.

OTOLOGY.

BY J. B. SHAPLEIGH, M.D.

Does Disease of the Right Mastoid Produce More Intra-Cranial Trouble than the Left?

"Kœrner, of Frankfort, has lately drawn attention to the very interesting fact that diseases of the right mastoid process are more liable to cause intra-cranial mischief than those of the left process (*Archiv. f. Ohrenheilkunde*, xxii, p. 126). Of 151 post-mortem cases of intra-cranial affections following diseases, the right ear was affected in 90 cases, and the left in 57; this he tries to explain by the fact that the right lateral sinus lies deeper and more forward than the left, and that the layer of bone between it and the ear is therefore thinner than that on the left side, and thus more liable to be perforated by pus."—Adolf Bronner, M. D., *Med. Press and Circular.*

There may possibly be another explanation of this fact in the greater frequency of suppurative troubles on the right than the left side, while the left is the favorite seat of origin of chronic middle ear catarrhs.

Treatment of Boils in the External Auditory Meatus.

Dr. R. Cholewa, of Berlin, recommends a 20% solution of menthol in oil, for furunculosis of the external auditory canal. The remedy is applied by means of cotton tampons soaked in the solution. The application is not severe, the burning sensation soon ceasing, and it is said to give relief to the pain that is frequently intense.

The slight pressure from the cotton plug may have some effect in hastening the removal of the infiltration. I have used successfully in these cases, and especially in the diffuse infiltration of the external meatus, gelatin almonds containing one centigramme of ext. opii. These are made to fit the canal and exert some slight pressure on the walls. They have, therefore, a mechanical, re-

frigerant and sedative action. This is the treatment followed in Prof. Gruber's clinic in Vienna, and it is efficient in a large proportion of cases. Should it fail, however, incision should be resorted to at once.

Three Cases of Aural Polypus in which the Neoplasm was of Great Size, and Produced Serious Constitutional Symptoms.

Dr. R. W. Seiss, of Philadelphia, contributes a paper with the above title in a recent number of the *University Med. Magazine*, July, 1889. In the first case, a woman, æt. 21 years, was affected with epileptiform seizures from the presence of a large polypus, extending from the drum to beyond the meatus externus. As soon as this peripheral irritation was removed the woman recovered.

In the second case, a man, æt. 23 years, was found to have complete paresis of the facial nerve, marked vertigo, weakness and pallor. Examination revealed a large rugous polypus in the ear of the affected side. In the course of five or six weeks after removal of the polyp and antiseptic treatment of the ear, the paresis had disappeared, and the general health greatly improved.

In the third case, that of a man, æt. 21 years, there had been a slight bloody discharge from the right ear for eight years; recently there had been pain. The patient had been weak, easily nauseated and faint. A large, tough, mulberry-like polypus projected from the meatus; upon its removal the man's condition immediately improved.—*Am. Jour. Med. Sci.*, Sept., 1889.

These cases are interesting as showing that severe general symptoms may be due to aural irritation. The mental condition also may be greatly influenced by the state of the auditory canal.

The Effects of the Discharge of Fire-Arms upon the Ear.

H. Nimier, Surgeon-major, has formed some conclusions on this topic which are published in the *Archives de Medecine et de Pharmacie militaires* (No. 7, July, 1889), as follows:

1. The detonation caused by the discharge of fire-arms is a complex noise caused by: *a*, the vibrations of the barrel of the piece, excited by the passage of the projectile; *b*, those resulting from the transmission of movement to the accessory parts of the weapon and to neighboring objects; *c*, those excited in the projectile itself at the moment of its leaving the barrel of the piece, in which it has been rubbed; *d*, and, finally, the actual waves of sound, caused both by the projectile in its passage and by the gases due to the deflagration of the charge.

2. The effect of the discharge of fire-arms upon the ear results, in most cases, not from the shock of the explosion of gases, but from the action of sonorous waves transmitted to the membrana tympani and all of the acoustic apparatus.

3. The popular practice of looking toward the mouth of the canon, of slightly separating the jaws and lips at the time of the discharge, as well as the want of confidence in the utility of a tampon of cotton in the ears, are in accordance with the views of the author.

4. The discharge of fire arms can produce, beside rupture of the membrana tympani, deafness and subjective noises and various functional disturbances of a reflex nature, especially in the sphere of the bulbar nerves. —*Am. Jour. Med. Sci.*, September, 1889.

Electrolysis in Aural Polypi.

Prof. Joseph Gruber, of Vienna, concludes (*Wiener Med. Blatter*, No. 8, 1889) that polypi and granulations in the ear may be destroyed by this method, the rapidity of cure depending on the strength of the current and the duration of its application. It is painful, aud can be borne for only two minutes at most. Growths as large as peas were destroyed in two weeks after one application of the current. He advises against its use except where instruments cannot be employed. This must be very seldom and granulations which can not be removed by snare or hook can be easily destroyed by cauterization.

The current used was from ten elements of a Siemens and Halske's battery, either with the anode in the growth and the kathode on the mastoid, or both poles in the growth separated from 1 to 2 mm. from each other.

A Pea in the Auditory Canal for Thirty-two Years.

Dr. W. F. Morgan, of Leavenworth, Kan., reports the following case: Mrs. William H., German, æt. 40 years, called on July 17, 1889, complaining of her right ear, stating that when 8 years old she inserted a pea into each ear; that her mother removed the one in her left ear, but was unsuccessful in her attempts to remove the other, which she believed to be still in the ear. The patient was suffering from vertigo, nausea and "noises" in her right ear. The watch could be heard only when in contact with the auricle. Hearing of left ear normal. After repeated irrigations, on three successive days, with warm rain water, and the removal of much hardened cerumen, at the time of her third visit the pea was removed by a Sims uterine tenaculum. It was nearly perfect in form, but very black in color, after its sojourn of thirty-two years in the canal. The watch can now be heard at two feet, and all abnormal sensations have disappeared, except slight soreness of the ear, which will probably very soon entirely subside.—*Med. Rec.*, Aug. 4, 1889.

The above is an exemplification of the fact that foreign bodies may remain for a long time in the auditory canal without producing serious injury, and is a warning against undue haste in attempting their removal without proper light, appliances and knowledge of the parts involved in the operation.

The general practitioner should note this and not probe around in the dark, whereby the difficulty of removal is almost invariably increased and the greatest damage to the ear may be caused. Text books on otology contain sufficient examples of the lamentable results of unskillful attempts at removal to prevent their recurrence. But this warning is too apt to be forgotten in the excitement of the moment, and aurists will probably continue to find that the greatest obstacles to successful removal of foreign bodies from the ear are frequently caused by the bungling and forcible attempts at extraction which have already been made. Foreign bodies should of course be removed from the ear, but never by unskillful hands, nor in the absence of proper illumination and appliances. Without these it is far better to let them alone.

The Diagnosis of Perforation of the Drum-Membrane.

Dr. Spear proposes the following method for detecting minute perforations of the drum-membrane: While looking into the auditory canal in the ordinary manner, with speculum and mirror, hold a piece of cold glass close to the speculum, have the patient do the Valsalva experiment, and if a perforation exists the vapor of the breath will be condensed upon the glass and obscure the view.—*Boston Med. and Surg. Jour.*

The above procedure does not seem to add anything to the means of detecting perforations of the drum-head too minute to be seen, for it will fail in those cases where the Valsalvian experiment does not succeed, either from too great obstruction in the Eustachian tube or from individual inability to perform the inflation even with a tube more or less open. It is not unusual to find cases where Valsalva's method fails while Politzer's succeeds well. If air can pass through the perforation it can be heard by means of the auscultation tube, and Politzer's method of inflation will more often succeed in forcing the air through than Valsalva's.

It is not always possible, however, to force air through a minute perforation, but when the accepted methods fail this new one will fail also.

Deafness as a Result of Nasal and Dental Disease.

Dr. D. H. Goodwillie has an article under the above title in the *N. Y. Med. Jour.*, August 24, '89, in which the importance of directing thorough treatment to these sources of aural disease is urged, and some special methods of procedure are given. The paper concludes with some very interesting cases bearing on the subject and is very complete and instructive.

Pilocarpine in Deafness.

There seems to be a general feeling that this remedy will not accomplish all that was at first hoped for from it.

Politzer, who introduced it, seems inclined now to disparage it, and Dr. T. J. Woodhouse, in the *Brit. Med. Jour.* (July 20, '89), reports five cases in which it failed to accomplish more than the slightest temporary improvement.

Danger to the Ear from the Nasal Spray.

The possible danger of exciting aural inflammation by the use of the nasal douche has been conceded, and now Dr. C. W. Richardson claims that the nasal atomizer has the same defect.

In a paper read before the Section on Laryngology and Otology at the meeting of the Am. Med. Ass'n he reports three cases of middle ear inflammation from its use.

The medicaments used were Dobell's solution and tannic acid, gr. j to f℥j.

The author was not opposed to using the atomizer, but wished only to call attention to a possible source of danger.

I have never met with this accident from the use of the atomizer, though I have seen aural inflammation follow the use of the douche and snuffing fluid from the hand. The spray certainly reduces the danger to the minimum.

Notes from the American Otological Society.

The last meeting of this society, held on July 16, '89, at New London, Conn., was a very successful one. Many interesting papers were read and the discussion was animated and to the point.

As of special interest we may mention a "Report of Three Deaths Following Otitis Med. Sup. Acuta." A fatal result is rare in first attacks of this disease.

Two autopsies were obtained in the cases reported by Dr. Wilson, the cause of death in one being purulent meningitis and in the other abscess of the cerebellum.

A very interesting discussion followed this paper, in which the difficulty of making a differential diagnosis between abscess of the brain and meningitis was brought out. Dr. S. D. Risley thought that the temperature should be considered in connection with symptoms of pressure. The temperature will be higher from the beginning, and symptoms of pressure will appear later in meningitis than in abscess.

A case of bony closure of both external auditory canals with good hearing power was reported by Dr. E. E. Holt, of Portland, Me. In this case there was a history of previous abscess in both ears but no discharge for 5 years. Patient consulted the doctor for some eye trouble, and his aural condition was only incidentally discovered.

Dr. Wm. H. Carmalt, of New Haven, reported a case of epithelioma of the middle ear. Patient had a suppurating ear for forty-two years when pain began in and around the ear and the discharge became very offensive.

Paralysis of the facial followed. Portions of the mass in the external canal proved to be carcinomatous. All attempts at removal of the diseased material from the middle ear gave only temporary relief, and death resulted from hemorrhage, probably from the lateral sinus. No autopsy was allowed.

TRANSLATIONS.

A CASE OF SPLENO-PNEUMONIA.

BY DR. DEVILLE.

Translated by Dr. Wm. N. Beggs.

In addition to the acute pulmonary affections which present to the observer the classical signs and are easy to diagnosticate, there are those whose clinical appearance departs from the usual picture. They simulate at the same time many different diseases and plunge the observer into the greatest embarrassment. Such is the following case:

Eugene P., æt. 25 years, formerly a bank employe, gives no preceding pathological history, hereditary or personal.

January 22, 1889, he began to feel in the left side of the thorax a slight pain, like a band situated transversely a little below the nipple. Pain increased with respiration; appetite was poor. Patient continued at his work without a great deal of pain until the 27th when, toward 9 P.M., without appreciable cause, the patient being in bed, the pain suddenly increased. It radiated toward the shoulder and rendered the least movement very painful. At the same time severe dyspnœa appeared. Toward midnight the patient was seized with severe rigors which did not disappear until morning.

On the 29th he entered the hospital.

General Symptoms.—Temperature at 9 A.M. is 37.8° C. Pulse presents nothing peculiar. The patient is not prostrated; he answers clearly all questions; dyspnœa has disappeared; the side is much less painful; there is, however, some tenderness on pressure at the anterior extremity of the fifth intercostal nerve; no cough; expectoration insignificant and without character; no herpes zoster.

Physical Signs.—*Inspection.*—Nothing noticeable; no appreciable fullness.

Palpation.—To the left, posteriorly, in the lower half of the chest vocal fremitus is entirely abolished. It gradually returns toward the apex. In front, beneath the clavicle, fremitus is more marked than on the opposite side.

Percussión.—Absolute flatness in the lower half of the left chest. This region is sharply bounded by the axillary line. Traube's semilunar space is preserved. There is tympanitic resonance beneath the clavicle.

Auscultation.—In the region of flatness the vesicular murmur is completely abolished. It is replaced by strong bronchial breathing. In the upper half of the chest, as well as beneath the clavicle, the respiration is exaggerated. There are no rales. A very limited tegophony exists at the level of the seventh dorsal vertebra. There is marked aphonic pectoriloquy limited to the region of dulness. There is no displacement of the heart. The right chest is healthy. Two blisters are placed on the diseased side, one anteriorly, the other posteriorly.

In the next few days the stitch in the side gradually disappeared. On auscultation fine crepitant rales were to be heard on inspiration at the base near the axillary line. On percussion the tactile resistance gradually became less marked and resonance reappeared. The temperature, which on the evening of the 29th was 39.7° C., became normal on February 6, after having oscillated at first between 38° and 39°, then between 37.5° and 38°.

On February 15, the resonance is almost normal. Respiration is heard throughout the center chest; the fine crepitations have disappeared; the patient spent an hour in the garden.

On the 17th he stated that his respiration was more difficult and he perceived a slight pain where the stitch in the side was originally located. Examination of the chest revealed nothing. There was no fever.

In the succeeding days the patient became better and better. He respired freely and ate with a good appetite. He could be considered well.

The disease lasted ten days. The general symptoms were not well marked. The fever lasted only seven days. The physical signs, on the other hand, were sharply marked, consisting of flatness, abolition of vesicular murmurs, bronchial breathing, aphonic pectoriloquy with persistence of Traube's space, gradual return of the resonance, accompanied with fine crepitation limited to the level of the region of flatness, beginning on the third day and disappearing six days later.

What disease have we before us? The first thought in the presence of the well marked physical signs is that it is a case of pleurisy. The flatness, egophony and especially the abolition of vesicular murmurs plead in favor of this diagnosis. The persistence of the sonorous zone of Traube, however rare in this affection, may be observed if the exudation is slight. How, on the other hand, can we explain the limitation of the flatness to the axillary line and the gradual return of vesicular murmur from below upward, and especially the short duration of the disease, the *restitutio ad integrum* without trace of pleural friction, etc.? Still less can we think of an encapsulated pleurisy, a rare disease and seldom primary.

Was the patient attacked with pleurisy accompanied by pulmonary congestion? The viscid, aerated, thready expectoration which, as Bouillaud states, is a constant sign of congestion, was absolutely wanting. On the other hand, there were a few fine crepitations on inspiration which are scarcely in accord with this hypothesis.

Can we accept a diagnosis of pneumonia? The absence of expectoration, the absolute flatness, and the ul-

timate course of the disease suffice to demonstrate that it is not a case of pneumonia.

The variety and changeability of the physical signs, the concomitant bronchitis, the abundant expectoration and crepitation which characterizes pulmonary congestion have not been observed in this case, and besides, how can we conceive of a pulmonary congestion accompanied by flatness and complete absence of vesicular murmur which in this affection is always normal or slightly increased?

For the same reasons we reject a localized tuberculosis masked as a pneumonia (bacillary pneumonia.—Rep.) which could begin abruptly and simulate a frank pneumonia. The complete and rapid recurrence of health does not permit this diagnosis.

Prof. Graucher described in 1883, under the name of spleno-pneumonia, an affection characterized by the following symptoms: Flatness, considerable diminution of vesicular murmur, soft, blowing, broncho-egophony, to which it is necessary to add fine crepitations limited to inspiration, preservation of Traube's space, and the progressive increase of vesicular murmur from base to summit, as recovery advances.

The author, in his paper, insists especially on the last three signs as characteristic of spleno pneumonia. Now, are not these the same signs which we have found and which have made us successively eliminate simple pleurisy, pleurisy with congestion, pneumonia and pulmonary congestion? Bourdel in a thesis, inspired by Prof. Graucher, states that this affection is almost always located in the left side, as it is in this case.

We have, then, a case of spleno-pneumonia. This was the diagnosis made at the second visit to the patient in the hospital. This affection approaches in its physical signs pleurisy, but differs from it in certain symptoms which must always be carefully looked for in badly defined cases, such as the one herein reported. From them important data as to prognosis and treatment can be derived.

Spleno-pneumonia, Prof. Graucher states, is more grave than simple pleurisy.

If we remember that these words were written in 1883, we shall not be surprised at this assertion. But since this time the interesting researches of MM. Landouzy, Kelsch and Vaillard have noticeably increased the gravity of so-called simple pleurisy, and depending upon these works we think we are justified in considering the prognosis of spleno-pneumonia as being less grave than that of pleurisy. Our patient also offers a very good example of the benignity of this affection. Up to March, 1889, his health has been perfect.

As regards therapy, a certain diagnosis will cause unsuccessful thoracenteses, which even the most experienced practitioners often perform, to be avoided.

Yankee Enterprise.—Two German medical journals display in glaring type the virtues of Warner's Safe Remedies.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,
Editor.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, OCTOBER 5, 1889.

More Diploma Mills Unearthed.

The *Boston Herald* of Sept. 29, exposed the nefarious workings of more bogus medical colleges, from which diplomas were issued promiscuously at rates to suit the pocket of the purchaser. The plan seems to have been carried out on a larger and more liberal scale even than the famous "Druid College" of Maine, which was exposed some years ago. Its methods were in brief, these:

Any person desiring to buy a diploma covering both medicine and surgery has, if posessing the necessary money, been given his choice of the following institutions, all of which exist merely on paper: University of Cincinnati, Montreal Medical College, New York State Medical College, Tenton (N. J.) Medical College, University of New Hampshire, Trinity University of Medicine and Surgery. The value of sheepskins representing the above institutions has varied from $60 to $300 each. There is no doubt but hundreds of them have been purchased throughout the West and South, while New England alone has been victimized by scores.

Dr. D. S. Adams, of Manchester, who is Chairman of the State Board of Censors, while pursuing official investigation in the State Department last November, discovered the incorporation of an institution about which he immediately became suspicious. It was the University of New Hampshire, nominally located at Nashua, and officered by Fred. G. Wheaton, Ph.D., as President, and H. F. Bradbury, M.D., Secretary. In the course of his investigations he discovered that these persons were connected with the "Trinity University of Bennington," though passing under other names, Bradbury also doing an active business in Lowell, under the name of Dr. Freeland. There, it was learned, a large correspondence was received, showing that the vast

amount of mail sent from and delivered at Bennington, Lowell, Nashua, and Boston combined was probably only a small per cent of existing evidence relative to the great systematic swindling that was being done. Bradbury, it was learned, figured as "Dr. Ripley," of 71 Corn Hill, Boston, where all correspondence appertaining to Trinity University was forwarded. When Dr. Adams' agents had completed their negotiations with Ripley it was agreed that a diploma of Trinity University should be delivered to them upon receipt of a handsome financial consideration. This was done, a newspaper man who was working on the case volunteering to pay for the sheepskin. As soon as it was evident that a criminal case had been made out the matter was given in charge of the authorities.

History and Cost of the Didactic Lecture.

The *Med. Rec.* for July 27, 1889, contains an editorial under the above caption which calls for thought on the part of all medical practitioners and medical students. It is not to be doubted that the didactic lecture has diminished and is constantly diminishing in importance in America. The reason for this is also tersely stated in the same article. "The average didactic lecture has run on in the old groove."

The editorial of course applies to America and America only. Such a condition of affairs is not to be found in either England, France or Germany. There the didactic lectures maintain their old time value and attention.

It is a matter for regret that the condition in America is what it is. The didactic lecture has its office and should neither be abolished nor neglected. In the didactic lecture not only the recent advances, but also the present state of the various branches of medicine should be taught. In no other way can this instruction be so profitably imparted.

It is true that all such information may be found in books or the current literature of the day. On the other hand it is also true that a very large percentage of our medical practitioners do not and can not have access to this literature. The reports of investigations and advances in the various branches of medicine are too widely scattered for the practitioner to be able to reach them. The didactic lecturer, however, the college professor or instructor, can, and should be expected to collect and present this information to his classes. When that is done we shall hear no more complaints about the decadence of the didactic lecture. When that is done our graduates will return oftener to our college halls and classrooms to learn what advances and discoveries have been made by our investigators.

So long, however, as the present system of medical education is in vogue can we have no hope of improvement. So long as our didactic lecturers are content to indulge in the twaddle of second childhood can we expect to see the attendance and attention continuously diminish. So long as it is allowable for any half dozen physicians, regardless of their attainments or qualifications, regardless of lack of reasonable endowment, to found a medical college for the sake of the advertisement and financial profit it will bring them, so long can we await no improvement. So long as no state supervision is exercised, so long as our colleges are not endowed, so long as the theoretical chairs in our colleges are not held by men who devote their entire time to their special branch of learning, so long as ten months or even three courses of lectures is the minimum time required by law for the study of medicine, so long as uneducated men are allowed to be candidates for the degree of doctor of medicine, must we expect to hear that such men as Von Esmarch are reported to be astounded at the ignorance of American physicians, and that good didactic lecturers and lectures are not to be found.

The Flagella of Bacteria.

It has been supposed by many persons that all motile bacteria would ultimately be shown to possess flagella or cilia—organs of locomotion; but owing to their extreme smallness, they have hitherto been demonstrated in very few cases.

One of the epoch-marking papers in bacteriology is one just published by Loeffler, the distinguished bacteriologist of Greifswald (*Centralblatt f. Bacteriologie*, Aug. 18, 1889, vi, 209–224, with 8 photograms of flagellate species), in which he shows the presence of flagella in a micrococcus, small bacilli, the "comma" forms, etc., as a result of the introduction of an entirely new method of staining these organisms, the employment of mordants. The materials which he found most useful are:

1. *Mordant.*—To 10 cc. of 20% aqueous solution of tannin add a few drops of an aqueous solution of green vitriol (ferrous sulphate) until a black-violet tint is obtained; 1 part of logwood is steeped in 8 parts of water, and 3 or 4 cc. of the decoction added to the preceding, changing its color to an impure dark violet, but ceasing short of precipitation. The addition of 4 or 5 cc. of 5% carbolic acid adds to the permanence of the mordant.

2. *Stain.*—To 100 cc. of saturated anilin oil water (made by thoroughly shaking up a few drops of the oil in a quantity of water and carefully filtering), 1 cc. of 1% solution of sodic hydrate is added, the whole is poured in an Erlenmeyer flask containing 4 or 5 gm. of one of the commonly used anilin powders (fuchsin, methylene blue or violet), closed tightly with a rubber stopper, and well agitated. When wanted for use a few drops of this saturated staining fluid is filtered directly onto the cover-glass.

Cover-glass preparations, dried and flamed in the usual way, are flooded with the mordant and allowed to steam over the burner for a short time, then very thoroughly washed in water, a few drops of the filtered sat-

urated stain placed on the preparation, and this gently steamed over the flame for several minutes. When the preparation has assumed a black-red color (if fuchsin is used), the dye is rinsed off under running water and the cover examined and mounted in the usual way.

The Johns Hopkins University.

So many rumors have been going around lately regarding the impending disruption of this institution, that it affords us much pleasure to chronicle news concerning it of a different character. President Gilman authorizes the statement that the University begins its regular course on the first of October with unimpaired efficiency. Neither the salaries of the President nor those of the Professors have been cut, and several new appointments have been made. The indications point to the usual number of students, and the course of instructions will be given as announced in the programme. As to the finances of the university, it is no secret that the income derived from the Baltimore and Ohio railroad was cut off some time ago, but the accumulated income of former years, the income from investments outside of the railroad, the income from the tuition (which amounted last year to nearly $40,000) are available. Besides all this, generous persons have subscribed the sum of $180,000 to be expended as an emergency fund during the next three years. A new building given by Eugene Levering, of Baltimore, is now going up. A lectureship in literature has been endowed by a gift of $20,000. By the bequest of John W. McCoy, the university inherits his library of 8,000 volumes, and it is the residuary legatee of his estate, estimated at above $100,000, exclusive of the library. It is safe to say that within six months the Johns Hopkins University has received from these various sources nearly $300,000 and other gifts are expected. The national character of the institution is a strong reason why its work should receive important aid from a distance. It will be thus seen that no consideration need be given to alarming rumors, as the present efficency of the university is assured for the next three years.

The Treatment of the Opium Habit.

The opium habit is one of the most difficult things which the physician has to treat. The plan of gradual reduction of the dose, though seemingly very feasible on its face, presents many difficulties and annoyances in the way of a complete cure to which those only who have tried it can testify. The other plan, sudden and complete withdrawal of all supplies of the drug, combined with placing the patient under surveillance, tends to destroy the last remnants of honesty and self-respect, if he has any left.

This plan is attended by the constant danger of sudden and complete exhaustion, and added to this, the agonies of suffering the tortures of the damned, which the patient must undergo, sometimes impelling him to self destruction. Surely all this should lead us to welcome any method or modification which relieves the crudeness of our treatment or lessens the sufferings of the patient.

Dr. H. E. Smith, in "*Atl. Med. and Surg. Jour.*," outlines a course of treatment, of which we give the following sketch:

Preliminary sedation is the grand essential to success in this method of treatment, and without it the minor details of treatment will be utterly worthless. Those who rely on the expectant treatment will find that hypnotics fail to relieve the insomnia; astringents have no power over the diarrhœa; vomiting goes on unchecked in spite of emetics, and restlessness does not yield to sedatives unless the chief causal factor in all these conditions—the spinal cord—be primarily controlled. This effected, the rest is easy.

An intelligent nurse, preferably a trained nurse, is needed, and a well ventilated, sunny bedchamber, in close proximity to a bathroom, are also prerequisites. A large reduction of the dose, usually about one-third, can be made at once, as all opium users take more than is necessary for their comfort; the patient is at the same time informed that he will be allowed enough to keep him comfortable. An opium taker is not without honor, and should be trusted until he proves unworthy of it, for in the urine we have a watcher that cannot be deceived, and will truly tell us whether opium is being taken or not. A drachm of sodium bromide dissolved in 6 or 8 oz. of water acidulated with the juice of lemons is given twice daily, and the dose is increased daily by thirty grains, so that on the fifth day three drachms are being taken night and morning. Slight symptoms of bromism now become manifest, and the quantity of morphia is rapidly cut down and in a few days withdrawn altogether, while we continue to give the bromide at the maximum dose when its effects become apparent. Now come the symptoms which follow the discontinuance of opium, but much different from those ordinarily observed. The diarrhœa is not exhaustive, and can be checked. The stomach performs its duties properly, but should nausea or vomiting set in, they yield readily to small quantities of beef peptonoids, acidulated with phosphoric acid. Restlessness is best combated by the hot bath, beginning at 95° F., and running it up to the point of approaching discomfort; the patient is allowed to remain in it 15 to 20 minutes, and then rapidly dried, warmly wrapped and put to bed. The bath is repeated as often as necessary. If a diarrhœa is inclined to be excessive, large enemata of hot water will hold it in check, or astringents may be given by the mouth, catechu and coto ranking first. A condition of insomnia ensues on the discontinuance of opium and lasts for ten days or more. In cannabis indica we have a reliable hypnotic in these cases, not given in homoeopathic, dilutions, but boldly in doses of a half drachm of Squib's fluid extract, repeated if necessary. For the neural gias, localized galvanization, and faradization for the

less acute neuroses, will give the best results. For the depression, cocaine hydrochlorate in ¼ grain doses with capsicum will meet the indications, as the fluid extract is a nauseous dose. While the symptoms are being met the bromides are discontinued on a descending scale. Tonic and dieting treatment is afterwards required. The painful neuralgias, which are frequently the source of the primary addiction, and which are so prone to recur after cure, may be met by the following:

℞ Antipyrin - - - - - - ʒiij.
Extract cannab. ind.,
Ext. aconite - - - aa. gr. vss.
Caffein - - - - - - . ʒss.
Hyoscin hydrobrom., - - - gr. j.

Div. in caps. No. xxx. Dose, one capsule, repeated if necessary.

After cure the patient must abstain from, and repel all temptation to indulgence. Relapse may follow a cure if he does not do this, just as malaria may recur after exposure, without proving the failure of treatment in either case.

MEDICAL ITEMS.

For Indolent Ulcers.—Pepsin, ℥jss. to lanolin, ℥j. is said to make a most valuable application to indolent ulcers.

Dr. J. W. Lanius is traveling in the interest of the Review; we bespeak for him the kind consideration of our friends.

To Render Milk more Digestible.—Where milk agrees badly with patients, it is said that shaking it thoroughly just as lemonade is shaken, will render it more digestible.

Pilocarpine in Jaundice.—Pilocarpine used hypodermically is said to be efficient in jaundice where it is not due to neoplasms of the liver; the subjective symptoms yield at once.

Mosquito Bites.—For mosquito bites and the bites of other insects, a writer in a foreign journal suggests that the affected part be painted with chloroform, which will at once relieve the pain and itching, and soon reduce the swelling.

Preserve your Instruments.—To preserve your instruments from rusting, immerse them in a solution of potash for a few minutes, and they will not rust for years, not even when exposed to a damp atmosphere.—*Columbus Med. Jour.*

Decrease of Population in France.—The *Progres Med.* says that the birth records of the government show a lamentable condition of affairs. In 1888 there was a marked diminution in the number of legitimate births, 16,794 less than in 1887. Were it not for illegitimate births, the population of France would decrease rapidly.

"What's the Matter?" the schoolmistress asked.
"Back's sore, ma'am."
"What made it sore?"
"Pop pounded his thumb with the hatchet this morning, and I laughed."—*Epoch.*

Elixir Victims.—About Sept. 20, at Jefferson, Tex., experiments with the elixir were made on seven persons, suffering from various disorders, rheumatism being the prevailing complaint. One of the subjects, after receiving the treatment, was "able to lift a chair above his head—something he had been unable to do for months before." He has since died from blood-poisoning; another is expected to die, and fears are entertained regarding the three others.

Tolerance in Diphtheria.—It is claimed that there is in diphtheria a tolerance for alcohol, and also for mercuric chloride, just as there is in snakebites a tolerance for alcohol. Dr. John Coleman relates two cases, one of a child sixteen months old who took $^1/_8$ grain of bichloride hourly for seventy-two consecutive hours, and another child of three years who took $^6/_8$ grain in six hours, and a total of 10½ grains in nine days, both cases recovering. He begins with small but increasing doses.

A Test for Drinking Water.—An English physician in writing about drinking water says: "If, in any hotel or summer resort to which these lines may come, there should occur a single case of typhoid fever or diphtheria, test the drinking water or have it done. A few pence will buy an ounce of saturated solution of permanganate of potash at a chemist's. If, when a drop of this solution is added to a tumbler of water, its color changes to brown, it is unfit to drink; if it remains clear or slightly rose-colored after an hour, it is, broadly speaking, safe."—*Times and Reg.*

The Owner of Hunyadi Janos.—David Andreas Saxlehener, owner of the Hunyadi Janos, who died recently, was an uneducated but sharp-witted man. He was in the clothing business at Budapest, when a peasant remarked in his store that he had very bad luck in boring wells for water on his farm, getting only an ill-smelling liquid that he feared to use. Saxlehener procured a sample of the water, had it analyzed, bought the peasant's farm, and became many times a millionaire through the sale of the water.—*Med. and Surg. Reporter.*

A Common Error.—Dr. Webster Fox, in the journal of the Franklin Institute, maintains that the majority of blind people have lost their sight from want of proper care during infancy, and that nurses or mothers

who heedlessly expose an infant's eyes to the glare of the sun for hours, may be laying the foundation of the most serious evils. He protests against permitting young children to use their eyes in study, and declares that the eye is not strong enough for school work until the age of seven to nine. Children should not be allowed to study much by artificial light before the age of ten, and books printed in small type should be absolutely prohibited in the school-room.—*Times and Reg.*

A New Method for Producing Local Anæsthesia.—Dr. Voituricz, in *Jour. des sc. Med. de Lille*, proposes the following plan, which, he says, permits of the production of local anæsthesia which does not pass off for from ten to fifteen minutes. It consists in projecting on the region to be anæsthetized, from a distance of 10 cm. (4 inches) a stream of two or three ounces of the following solution:

℞	Sod. subcarb., - - -	gr. viij.
	Magnes. carbonat., - - -	ʒij.
	Limaturæ ferri, - - -	gr. iij.
	Sodii chloridi, - - - -	gr. j.
	Aquæ, - - - - - -	Oiij.

M. Impregnate with gas from marble powder and acid. sulphur, aa. ʒx. One application suffices for five or six minutes, when it may be necessary to repeat it.

Billroth on the Dangers of Carbolic Acid.—The following letter of Dr. Th. Billroth of Vienna has been published: "I have lately seen four cases, in which fingers which had suffered a most insignificant injury be came gangrenous through the uncalled-for application of carbolic acid. Carbolic acid is now much less used in surgery than formerly; we have only gradually become acquainted with its dangers. The acid may not only cause inflammation and gangrene, but also blood poisoning, and so may even prove fatal. It is useful only in the hands of a skillful surgeon, and ought never to be used without his advice. The best lotion for recent injuries is the ordinary lead lotion, which can be bought at any chemist's. The best antidote in carbolic acid poisoning is soap, which should be taken immediately and repeatedly until all symptoms of poisoning have disappeared."

Treatment of Fractured Patella by Wiring the Fragments.—Dr. Ceci, at the Surgical Congress, of Bologna, reported eleven cases in which he had treated fractures of the patella by subcutaneous wiring with buried sutures. The patients were for the most part between fifty and seventy-eight years of age. In nearly all the cases the fracture was simple and transverse, but in one there was comminution of the lower fragment, and in another, a man aged sixty-nine, the bone had been broken a second time two months after the first accident. Dr. Ceci uses silver sutures. All the cases had done well, hæmatoma and non-infective arthritis having occurred only once.—*Brit. Med. Jour.*

CORRESPONDENCE.

FOREIGN LETTER.

Cologne, September 15, 1889.

Bardenheuer's Clinics—Sterilization of Dressings—Nephrectomy—Manner of Treating Fractures—Bonn—Trendelnberg's Clinic—His Method of Performing Sectio Alba—Extirpation of Kidney—Vesico-Vaginal Fistula, Operation through the Bladder.

Dear Dr. Bond.—Arriving at Cologne, I wended my way to the Burger Hospital, the large public hospital of the city. This hospital contains over 800 beds, including medical and surgical beds, and a department for women. The surgical material offered here is very extensive, and is exclusively under the control of Professor B. Bardenheuer, who, however, is not connected with any medical school, and stands very high in estimation as a practical surgeon. Dr. Bruhl, first assistant of the hospital, very kindly showed me the detail work of the hospital, and I had also the pleasure of accompanying Prof. Bardenheuer several times in his rounds through the wards.

The dressings are thoroughly sterilized before being used in this hospital by steam, by a very simple apparatus. The apparatus consists of several vessels of galvanized iron about twenty inches in diameter and three to four feet high, circular in form, open at the top, with a movable lid. To the bottom and top of these vessels are connected steam pipes, with cocks to control the steam. The steam enters at the bottom of each vessel and the pipes are so arranged that there is a complete circulation of steam. The outside of the vessels are covered with felt so as to retain the heat, and the lid of the vessel is made very heavy, so that steam pressure will not readily blow it off. The dressings are put into pails made of galvanized iron and of a diameter to leave about an inch space all around when standing in the steaming vessels, and of a size so that when three stand, one on top of another, the vessel is filled. The bottom, lid and sides of these galvanized iron pails are perforated so that steam can permeate the dressings which they contain. A bale is attached to carry the pails, and it is so constructed that it completely falls out of the way when one pail stands on another.

When the dressings have sufficiently heated the pails containing them are taken out of the steaming vessel and carried directly to the wards for use, and are used when still warm and moist; the pails being taken directly to the wards prevents the handling of the sterilized dressings until used by the surgeon.

When a pailful of dressings has been standing around for sometime it is again put into the steaming vessel and re-steamed.

This arrangement struck me as eminently practical and efficient, for we well know that heat is the best

bactericide that we have, and as the apparatus is so simple it can be easily and cheaply constructed, whenever occasion affords the extensive use of dressing material, and where steam is used for heating as in our hospitals.

I was very fortunate in having the opportunity to witness Prof. Bardenheuer perform nephrectomy extra peritoneally according to his method of "*Thur Fluegal Schnitt*," or rectangular-flap operation. The patient was a young woman, who complained of intermittent excruciating pains in the left lumbar region, with the concomitant syptoms which led to the belief that she suffered from nephrolithiasis, possibly a stone located in the pelvis of the kidney, and to demonstrate whether or not this was the case, the Professor performed his opertion, first exploratively, viz., making the usual incision parallel to the quadratus lumborum down to the cellular connective tissue, a length of perhaps six inches, and then to this incision at each angle of the wound making an incision, intersecting the primary incision at right angles, thus creating a rectangular flap about six inches long and four inches wide which, being dissected up, fully exposed the kidney in its full contour and gave full opportunity to carefully inspect and palpate the organ in every direction.

If you remember, it was urged against the extra-peritoneal method that the incision parallel to the quadratus was insufficient, and that the field of operation was too limited and did not give range enough for operative interference. This objection is thoroughly overcome by Bardenheuer's method, as was clearly shown me by the case under discussion.

On the kidney being exposed and carefully palpated, it was found that there was no stone present, but the kidney was in a state of cystic degeneration; in order to satisfy himself that no concretion was located in the ureter the professor opened the pelvis and introduced a sound through the ureter into the bladder, finding it perfectly clear. On account of the advanced cystic degeneration it was decided to extirpate the kidney, which was very easily affected, applying a ligature en masse to the vessels. The wound was stuffed with gauze and flap left without stiches.

About ten days after I had occasion again to visit the hospital, and found the patient looking bright and happy; the wound healing nicely, still unsutured, and every prospect of a quick and good recovery.

Bardenheuer is also much in favor of secondary suture of the wound.

During the clinic I had also the opportunity of seeing Bardenheuer apply Rose's method of operating on the throat and nose, in a case of cavernous fibromata of the posterior nares, by his inverted trunk method, namely, lowering the head so as to allow the blood to flow out of the mouth. The patient was a young man who had been suffering for some time from hemorrhage from the posterior nares, and all methods of trepanning failed to control it, for it would break out anew; so the Professor concluded to make short work of it, and remove the offending masses. Upon introducing curved forceps through the anterior nares, the hemorrhage became so excessive that the patient, who was not under anesthesia and in an upright position, was nearly strangled, and it was found necessary to invert him, so as to keep the trachea free, and in this manner to conclude the operation. A great mass of fungus-like tissue was removed, which effectually checked the hemorrhage. The young fellow evidenced a truly Spartan spirit and never flinched whilst his posterior nares were being gouged, pinched and pulled at.

Here at Cologne I saw some interesting, yet to me, seemingly rather complicated methods of treating fractures. Thus a rather complicated pistol-shaped splint is used for treating fractures of the radius. The seat of fracture is placed on a strip of material, either leather or canvas, each end of which rests on a spiral spring which is fastened perpendicularly to the side of the splint, and elevates the seat of fracture, with the idea, I suppose, of pressing from below upwards, and keeping the fractured ends in apposition. The springs serve the purpose of regulating the pressure. The whole contrivance is rather complicated and hard to describe. As far as success is concerned, I do not see that it offers any advantage over other and less complicated methods of treatment.

Fracture of the leg and thigh are treated by placing the limb on a level plain elevated slightly in front and applying extension by means of adhesive strips and weights attached to the limb opposite the site of fracture. Strips of adhesive plaster are fastened by partially encircling the limb and carrying them over on the side of the limb, the free end being fastened down to the mattress, so that the strips act as guys or stays, as it were, to the fractured bones, keeping the ends in apposition, and in a line parallel with the axis. The method is complicated and has to be watched to keep everything in place, and must be very tiresome and annoying to the patient, offering no advantages as far as practical results are concerned, with less comfort to patient and surgeon than the suspension and extension with Hodgen's splint.

I was surprised to know that gun-shot wounds were comparatively rare, and especially penetrating ones of the abdomen, Dr. Bruhl stating that there had only been a single case during the year, and this was not of a serious nature. This is rather surprising taking into consideration that Cologne is a commercial city located on the highway of commerce by rail and water, and therefore inhabited and frequented by all the rougher elements which usually are a factor in a commercial city. It is due to the fact that the revolver in Germany has not yet reached the dignity of a national weapon, the *garcons* being content to display their skill with fist and cudgel, and therefore the scarcity of gun shot wounds.

Very fortunately I reached Bonn, an hour's ride from Cologne, just in time to witness Professor Trendelnberg also extirpate a kidney, but intra-peritoneally. The patient, a boy nine or ten years old. had an immense abdominal tumor which Prof. Trendelnberg pronounced

to be the right kidney, and the growth malignant in character. The tumor was pretty freely movable, and Prof. Trendelnberg thought it could be easily removed. He made an incision through the center of the tumor to the right of the linea alba. It was found when the peritoneal cavity was reached that there were many adhesions posteriorly and that the extraction of the tumor was more difficult than anticipated. However, after a little careful manipulation it was snugly removed and proved to be of a cancerous nature.

I think it an open question as regards the choice of operation for nephrectomy, either intra- or extra-peritoneally, as each case must be considered by itself. Yet in cases where inflammatory and adventitious changes of the peritoneum and surrounding parts have not been too extensive, I think very favorably of the extra-peritoneal method as practiced by Bardenheuer.

Prof. Trendelnberg has a method of performing sectio alba that has many advantages. It consists in elevating the body and legs of the patient so that gravity draws the intestines and peritoneum out of the way and leaves increased space between the symphysis and peritoneum; one end of the operating table is arranged so that it can be elevated at an angle of about 45 degrees, and of sufficient length so that the body of the patient can lie on this inclined plane. The feet hang over the elevated edge, and are fastened to foot rests. The head of the patient rests on the horizontal part of the table. In this position the body lies at an angle of 45 degrees, and in consequence the intestines and peritoneum gravitate toward the head. This position was illustrated in a case in which the Professor excised the rectum for malignant disease. The patient was a middle-aged man, and Prof. Trendelnberg thought that possibly he could reach the disease extra-peritoneally by getting at it by the incision of sectio alba. Placing the patient in the above described position, he made the incision over the bladder, and I soon saw, when the pre-vesical space was exposed, how nicely the peritoneum fell out of the way; additional room was secured by making a transverse incision through the rectus, loosening it partially from its insertion into the pelvis.

It was found, however, that the disease was located too high, and could not be thus reached, so that the abdominal incision had to be enlarged, and the peritoneum opened. The attempt was then made to invaginate the rectum and draw the diseased portion through the anus, but this could not be accomplished either, so that finally the rectum was incised above the seat of disease and the lower end of the rectum was dissected off from the sphincter and removed along with the diseased part. The upper part of the gut that had been cut through was then pulled down and stitched to the margin of the anus.

It would have been better in this case to have performed Kraske's operation, viz., partial resection of the sacrum, as it would have given the patient a better chance than the operation as performed.

I was also shown the case of a woman for whom Prof. Trendelnberg had sewed up a vesico-vaginal fistula, through an incision into the bladder, as described in the operation by sectio alba, on account of the fistula being inaccessible through the vagina. The bladder had been sutured, and it was tested if union had taken place, this being the sixth day after the operation.

On gently filling the bladder under hydrostatic pressure, it was found to have united entirely, as no water forced itself through the line of sutures. The external wound was still open, being tamponned with gauze. The patient, an old lady, was in good spirits and happy.

I was fortunate to reach Bonn just before the close of the session, as during the vacation which follows, the professors take an outing so as to get into trim for the winter's work.

The Polyklinik buildings at Bonn are comparatively new and are very prettily located near the Rhine with pleasant surroundings and plenty of air and sunlight.

Along with its educational advantages, Bonn is very picturesquely situated on the banks of the Rhine in full view of the world-famed Drachen fels, the beginning of the beautiful scenery of historic fame.

A. H. Meisenbach.

SOCIETY PROCEEDINGS.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Annual Meeting held at Evansville, Ind., Sept. 10 to 12, 1889.

Dr. I. N. Love, St. Louis, read a paper on

Antipyretics, Analgesics and Sedatives.

Antipyretics act in various ways, some by limiting tissue change and heat production, others by increasing the power of eliminating the heat produced, increasing the activity of the sweat glands, and, lastly, those which abstract heat from the body.

As a general thing, the author's preference was for the cooling bath, antipyrine, antifebrine and exalgine. Whatever the means employed, the reduction of temperature should not be too sudden or excessive.

Of all analgesics, opium was considered to be the foremost, but it was objectionable in that it effectually closes the glands.

Acetanilide was favored because it is more active, safe, reliable and obtainable at small cost.

The sleep producing agents include all which allay pain and cause sleep, bromides, chloral, etc. Urethan was thought to be of considerable value, possessing advantages over others since it is soluble in water, non irritating to the tissues and can be given hypodermically. If pain is the cause of the sleeplessness, this drug will fail. Exalgine, though it has been before the profession only a few months, has been reported on favorably by many of its members. Dujardin-Beaumetz has obtained good results from its use. Two months' practice with it had made the reader feel justified in continuing

its use. The claim has been made that exalgine does not cause cyanosis, but the author observed it in some cases. He did not, however, consider this symptom of as much importance as it is generally held to be; he had observed it in a great many cases without serious results following.

He usually prescribed exalgine in combination with spirits vini rectificat. and elixir pepsinæ. Analgesia was its predominating effect.

The author laid stress on the advisability of every physician who makes use of these medicines dispensing them directly himself.

As to a preference between them, he placed acetanilide at the head of the list.

Discussion.

Dr. S. E. Mumford, Princeton.—I have seen these drugs given throughout the whole course of the disease; and I believe if that is done, it is at the expense of the strength of the patient.

Dr. Smythe, Green Castle, was emphatic in his advocacy of the use of these drugs. It had been demonstrated by pathologists that a continued excessive elevation of temperature would cause death in 48 hours, or would cause fatty degeneration of the vital organs. So antithermics must be used in such cases. He thought, however, that Dr. Love had not given sufficient prominence to the use of cold water in the reduction of temperature; this was the remedy usually employed by him.

Dr. Bransford Lewis, St. Louis, coincided, to a large extent, with the views expressed in the paper. He thought that these remedies held a very important place in the therapy of fevers, but they must be used discriminately and with great care. Their quieting, as well as antipyretic, effect could be put to great service in many cases where there was restlessness, aching, etc.

Dr. Hungate, of Kansas, also testified as to the favorable influence of acetanilide, in combination with other remedies.

Dr. Dudley S. Reynolds inquired as to the relative mortality of typhoid fever, when treated after this method or on the expectant plan.

Dr. Linthicum, of Evansville, had used exalgine in five or six cases of neuralgia, but had never yet seen any favorable effects from it.

Dr. Jno. H. Hollister, of Chicago, thought that acetanilid did good service in certain cases. In order to determine the best method of controlling high temperature, the cause and manner of its production should first be ascertained. This, then, would guide us in our endeavors to control it.

Dr. Lucius Grey, of Chicago, reported beneficial results in the treatment of epilepsy with antifebrine.

Dr. J. A. Larrabee, of Louisville, never used the antithermics under discussion, as he found cold water capable of answering all requirements.

Dr. Love, in closing the discussion, said that, with reference to the report of Dr. Linthicum, a half dozen cases were not a sufficient number upon which to base a conclusion. He had previously pronounced in favor of acetanilid in the treatment of epilepsy. He believed that these drugs were a very valuable addition to our means of handling typhoid fever and allied diseases. The antipyretic effect is not the most important effect obtained; the tranquilization, which they produced was equally as desirable.

Dr. E. S. McKee, of Cincinnati, read a paper on

Sterility in Woman—Its Etiology and Treatment.

The author found the subject a difficult one. He thought the most common cause of sterility was intra-uterine disease, and chronic endometritis its general manifestation. Inflammation of the pelvic peritoneum and of the parametria or their consequences are a frequent origin. Three things must be determined: are spermatozoa in the semen? Do they get into the utero-cervical canal? Do the vaginal secretions poison the spermatozoa? Sterility in man must be eliminated before seeking the causes of childless marriages in the wife. Gross claims that one out of six sterile marriages are the fault of the husband, and Kehrer claims one-third, and the cause of the barrenness was gonorrhœa. The habits of the wealthy diminish fertility, while those of the poorer classes seem to favor it. The injurious effect of excessive fat in women as regards childbearing is generally admitted. The prospects of offspring will depend more on the menses than the flesh, amenorrhœic fat women being usually sterile. The prevalence of spasmodic dysmenorrhœa among sterile women—about two out of five cases—leads to a belief that this condition has some influence upon sterility. Gonorrhœa is an important factor. The reflux of semen is not so important a cause as supposed, the mucous discharge of the glands of Cowper and Duvernay are often mistaken for semen. A Chicago professor has found in that city that the hair on the mons veneris of sterile women is straight. He does not advise curling the hair as a cure for sterility, however. Sexual incompatibility is well-known to exist. Sterility may be occasioned when necessary by obliterating the ends of the Fallopian tubes with the thermo cautery. Some authors claim that consanguineous marriages are sterile. Darwin finds these slightly more fertile than non consanguineous. He thinks this is a fact because such marriages take place where there are large groups of cousins, and fertility becomes hereditary.

The cure of sterility is one of the difficult tasks of gynecology. Our imperfect knowledge of the cause is the origin of our trouble when we come to treatment. Women addicted to alcohol have become pregnant upon becoming tetotalists. Obesity is treated by a rigid diet, the menses increase as the obesity decreases, and the patient frequently conceives. A hyperæsthetic condition of the vagina sometimes necessitates anæsthetization. The radical treatment of endometritis by curetting is frequently followed by conception. The author has had good results from a solution of per chloride of iron

one part, glycerine three parts, painted in the cervical canal in chronic endometritis. Constitutional treatment is often effective. Outerbridge has devised a new instrument for the cure of sterility. It consists of a steel wire, gold or silver plated, with a slight eversion at one end, with the other bent at right angles. This is inserted into the cervix. Catheterization of the Fallopian tubes is sometimes effective. Sea-bathing, residence at watering places, and the use of mineral waters has a very beneficial effect on many stubborn cases. The crystalline phosphide of zinc, one-third grain morning and evening, is highly recommended. Tea drinking and the ingestion of tannin and sulphur are to be avoided. Belladonna has the reputation of promoting conception. According to Cohnstein there are times with every woman which might be called the period of predilection for fecundation. If reflux of semen be the trouble, the hips should be elevated during coition, the penis allowed to remain as long as possible in the vagina. The taking of the knee-chest position immediately after coitus is recommended, and perinneorrhaphy is sometimes necessary. As a last resort artificial impregnation is necessary in otherwise hopeless cases. It is disagreeable to all concerned, but there are no real moral reasons against it. An alkaline vaginal injection of phosphate of soda should precede the operation to neutralize the vaginal secretions. Sexual intercourse should take place promptly; the syringe, new, free from infecting matter, should be at the exact bodily temperature, the semen taken up carefully, the nozzle inserted clear to the fundus and the fluid injected.

An extensive bibliography accompanied this paper.

SELECTIONS.

METHODS OF RESUSCITATING STILL-BORN CHILDREN.

The first step in Schultze's method is considered of great value for the reason that it commences by an expiratory act, and thus permits foreign matter or bodies to clear the air passages and escape through the mouth. Schroeder remarks, in his work on obstetrics, that it is doubtful whether it is possible by this method to clear the air-passages from foreign bodies as thoroughly as by means of a catheter. M. D. Nikitin, (*Jour. akoushserstva e jenskich boleznei*, No. 1, 1889), states that the moment the foreign matter reaches the posterior nares and mouth they must be removed artificially by the catheter, or the air-passages will become blocked up again at the first inspiratory act obtained by this method. Schultze himself, as stated by Hoffman (*Lehrbuch der ges. Med. 4te Auflage*), announces that his method has no success in prematurely born infants, for the reason of the softness of the chest-walls. And, as reported by different authorities, the main objection to the method is that ten to fifteen swingings of the child's body do not suffice to succeed in resuscitating it; it is necessary to perform thirty to fifty swingings in order to secure perfect breathing, and this heroic treatment implies great injury to the child. Dr. Winter (*Vierteljahr schrift fur d. ges. Med.*, 1887, Bd. xlvi, H. 1, S. 81) reports three post-mortems after such treatment; in one there was found an extensive extravasation of blood into the abdominal cavity; in the second, rupture of the liver and fracture of three ribs; in the third, rupture of the liver and bone injuries.

Though these cases might be considered as exceptional ones, yet they are easily understood. Dr. Nikitin states, with F. H. Champneys, that traumatism is very apt to occur in the asphyxiated infant, which is perfectly inert, with a weakened condition of the ligamentous apparatus, and especially being deprived of the flexibility proper to the living infant. According to Nikitin, Schultze's method is not to be abandoned entirely; he suggests taking advantage of the first step in this operation, which procures the first expiratory effort and so expels foreign bodies from the air-passages; he then uses the catheter to free the latter radically from the mucus, liquids, etc.; should the introduction of the catheter be attended by difficulties, he advocates repeating the same manœuvre for procuring expiration and, if not successful replacing this by Marshall Hall's method for the same purpose, using the catheter again for the removal of mucus, and immediately after this proceeding to insufflation through the catheter, or directly by the mouth of the operator.

The method of insufflation is too much neglected, the author thinks, the objections being, first, that the air fills up the stomach and alimentary tract rather than the lungs; and, secondly, that after forced insufflation the pulmonary alveoli are very apt to rupture. With the assistance of known authorities he experimented on dead subjects, and his opinion is that: 1. The introduction of air is performed with comparative ease. 2. Even with forced insufflation, the air enters more into the lungs more than into the stomach, and it never reaches beyond the pylorus. 3. In completely filled lungs not once has artificial emphysema been found to exist.

The precautions that he observes are to avoid occlusion of the larynx by introducing the little finger into the child's mouth and lifting the root of the tongue somewhat forward. The external nares are closed with the fingers on one hand during insufflation, and immediately after this the mouth is occluded by the other hand for several seconds, to prevent the escape of sufflated air. He introduced the tube or catheter to the root of the tongue only; occlusion of the larynx by the tongue is avoided at the same time; the introduction of the catheter into the larynx or trachea he considers as being not only unnecessary for success, but even harmful, for it is under these very conditions that emphysema is induced, and very frequently the visceral pleura is ruptured by the great tension of air. It is advocated to avoid such accidents by insufflation, either directly by the mouth or by means of a catheter, into the mouth of the child. He finds no objections to the filling of the

stomach with air by that means, for the air tension in the lungs is counterbalanced by that in the stomach, and artificial emphysema is thus avoided.

Other objections to the insufflation method are that the exhaled air of the operator is too poor in oxygen, and contains an excess of carbon dioxide; that foreign bodies present in the larynx are apt to be driven further into the lungs, which might result in pneumonia. Dr. Nikitin averts the first objection alluded to Pfluger's statement (*Arch. fur. Physiologie*, 1868, Bd. i, S. 61; also Schwarz, "*Die vorzeitigen Athembewegungen*, Leipzig, 1858) that the consumption of oxygen in the newly-born is so small that there is hardly any difference noticed between the arterial and venous blood of the umbilical vessels; and, according to Paul Bert (*Lecons sur la physiologie comparee de la respiration*, Paris, 1870), the muscular tissues of newly-born animals absorb less oxygen than those of adults in the proportion of 29 to 47; so that there is still a sufficient amount of oxygen in the exhaled air for the newly-born.

With regard to the excess of carbon dioxide, which is four per cent. according to P. Bert, respiration is interfered with in animals when the amount of carbon dioxide amounts to twenty-four per cent. under pressure of 760 mm.

Further advance of foreign bodies into the lungs can be avoided, it is stated, by carefully cleansing the child's mouth with the little finger, or by introducing the catheter into the larynx and aspirating. The author speaks highly of the use of insufflation, especially when simple means fail to bring about respiration; should even amniotic liquid, blood, and mucus be driven into the lungs, the mucous lining of the respiratory tract might absorb these substances, or they may be thrown off by the first expiratory effort (Shroeder).

The use of ether for inhalations or local applications to the nostrils (Harris Jones, *New York Med. Jour.*, August 21, 1886) Dr. Nikitin does not consider preferable to that of spirit of ammonia. He thinks that subcutaneous ethereal injections (Grose, of England) must be of value in the enfeebled circulation of the asphyxiated infant, but that experimentally this has not been sufficiently worked out.

Faradization of the phrenic nerve is advocated by Pernice, and is often of good service, but it has the objection of the foreign matter remaining in the respiratory tract, the essential inconvenience, however, being the absence of the battery when needed.—*New York Med. Jour.*

THE TREATMENT OF FELONS.

In an admirable lecture published in the *International Journal of Surgery*, Dr. A. G. Gerster, of New York, makes the following wise suggestions in regard to the treatment of this common trouble:

Such cases as this furnish a very large proportion of the surgical work done by every practitioner of medicine. There is, in my opinion, no better test of the surgical ability of a young physician than his manner of treating just such cases as this one. These inflammatory processes are generally suppurative and take their origin from some superficial injury to the integuments. The wound is either infected at the time of the injury, or it becomes subsequently poisoned by being brought into direct contact with the products of decomposition as is generally found in the case of laboring men, butchers, cooks, waiters, and others.

A felon of the little finger or thumb is much more to be dreaded than a similar trouble situated on either one of the three middle fingers. In the case of a felon situated on the little finger or thumb the suppurative process has a very marked tendency to run up to the arm. On the other hand a felon situated on either of the three middle fingers will ordinarily run no farther than the ball of the respective finger and perforate that region.

In order to thoroughly understand this peculiarity it will be neceesary to study the anatomical relationship of the tendons and sheaths of these parts. In dissecting the palmer region of the hand you notice, as a rule, the synovial sheath of the flexor tendons of the thumb and little finger run into a common bursa in the palm of the hand. The sheaths of the flexor tendons of the three middle fingers, however, end proximally in a blind sac each. Therefore when an inflammation attacks the little finger or thumb, the natural direction of the inflammation is towards the point of least resistance. After entering the common bursa of the hand it will proceed under the carpal ligament to the arm, and you have an inflammation that may, if unchecked, gradually destroy the usefulness of the arm, proceeding from a small focus in the little finger. When inflammation attacks either of the three middle fingers, the pus usually perforates at the ball of the respective finger and does no furthur damage than has already been inflicted on the affected finger.

As a felon is an acute suppurative inflammation, developing rapidly in dense tissue, the affected structures will be subjected to very great tension. When the focus is minute, containing but one or two drops of pus, when the patient's temperature is 104° or 105° F., when he has a headache and his tongue is foul and coated, when he has chills and cannot sleep at night, when he complains of a terrible throbbing pain in his hand, there can be no doubt in the mind of an intelligent surgeon that there is some serious trouble brewing, when so small a focus of inflammation throws the sufferer into such a state. If you have all these symptoms the first indication is to relieve that tension at once. The scalpel must be plunged right down to the bone. If it strikes the right spot, when it is withdrawn three or four drops of pus will follow, and that means that the finger has been saved from great danger by this little operation. The man who waits until the entire finger or hand is involved is no surgeon at all. The true conservative surgeon is he who will prevent the loss of a phalanx or a tendon,

and will thus avoid the necessity for amputating the finger, hand or arm.

If tension is relieved the extension of inflammation is prevented, even though the exact spot where the minute focus of pus is situated is not struck. In the palm of the hand is situated the superficial palmer arch; but there are ways by which it can be avoided. The palm of the hand is marked by a number of creases of the skin that resemble a capital M. That portion of the triangle bounded by the lines of this M, that occupies about the center of the palm, is the part to be avoided. It does not comprise more than a square inch.

A classical symptom of all deep seated acute suppurative inflammations is that the skin over the affected area is abnormally pale in the beginning of the process. In deep palmer suppuration there is pallor with dense swelling. Fluctuation is not found. The guide to the little focus of inflammation,which may contain but a few drops of pus, is a probe with which to first palpate in a general way so as to locate where greatest pain is felt. When the spot where the greatest pain is felt and the most intense sensitiveness exists is touched, the patient should turn away his head while the surgeon repeats the process until satisfied that the point of the probe has repeatedly touched the same locality pronounced by the patient to be the most sensitive. Then having marked that exact spot, and having applied local anæsthesia, a narrow-bladed knife should be plunged in the tissues well beyond the fascia. Should more than a few drops of pus escape, then the puncture must be extended to an incision. In order to prevent subsequent closure of the wound, a small strip of antiseptic gauze should be passed into the aperture on the end of a probe. When a moist dressing has been applied, so as to prevent inspisation and the formation of a crust, the surgeon has performed an act of conservative surgery of higher value to the patient and more creditable to himself than the most brilliant amputation.—*Med. and Surg. Rep.*

Plumbism of Unusual Source.—At a meeting of the Practitioners' Society of New York, the President, Dr. F. P. Kinnicutt, reported two cases of lead-poisoning of unusual source. The first patient was admitted to St. Luke's Hospital suffering from lead colic and wrist-drop. He had been employed as a florist, and on investigation it was found he had been in the habit of biting off the ends of the tin-foil used as wrappers for hand-bouquets. The tin foil used for this purpose contained as much as 80% of lead. There was no history of other souces of lead-poisoning. The second patient was admitted to the hospital suffering from lead colic, and presenting a typical blue gum line. He had been in the habit for several weeks, of drinking beer from bottles which, he said, were cleaned by his employer with lead shot. In the subsequent discussion, Dr. R. F. Weir recalled the fact that several cases of lead-poisoning, some years ago, had been traced to the use of a popular brand of chewing tobacco which was wrapped in tin foil.—*Med. Rec.*

Induction of Premature Labor.—Dr. Cheneviere, in the *Revne Medicale de la Suisse Romande*, gives an account of a simple method which he has employed for inducing premature labor. The cervix is brought into view with a speculum, and about twenty small iodoform tampons are passed through the os uteri by means of a thick sound. The plug reaches rather above the internal os. A larger plug is then placed against the vaginal portion to keep the cervical plug in position. Three cases are given in which the method was adopted. In the first pains came on in two hours, and the labor was terminated in fourteen hours; in the others, more than one plugging of the cervix was necessary, labor taking place on the following day. In one case some of the tampons were only passed several hours after the expulsion of the fœtus and placenta; and the author, therefore, thinks it well to have the tampons counted to avoid the possibility of any being left behind.—*Brit. Med. Jour.*

Invisible Ink.—M. E. Pecard has submitted to the *Academie des Sciences* an account of this chemical discovery. It is mixed acid procured by a solution of molybdic acid in boiling oxalic acid. He calls it oxal-omolybdic acid. The crystals of this acid are insoluble in strong nitric acid, but they dissolve in cold water. Paper written upon with the solution shows nothing in a weak light, but when brought into the sunshine the written characters suddenly appear in deep indigo blue. Paper saturated with the solution and dried in the dark becomes blue when exposed to the sun, and on this blue surface white characters may be written by dipping the pen in water. The color disappears in contact with water, and the blue writing becomes black when exposed to the heat of a fire.

Alcoholic Indulgence.—A committee of the British Medical Association reports: (1) That habitual indulgence in alcoholic liquors beyond the most moderate amount has a distinct tendency to shorten life, the average shortening being roughly proportionate to the degree of indulgence. (2) That of men who have passed the age of twenty-five, the strictly temperate, on the average, live at least ten years longer than those who become decidedly intemperate.—*Am. Prac. and News.*

Nitrate of Silver in Purpura.—The ordinary hemorrhagic remedies often fail to bring about a change in the obscure conditions which underlie the occurrence of purpura. The treatment under any circumstances is purely empyrical and symptomatic, and one is therefore disposed to welcome any suggestion based on clinical experience which offers the means of intervening with a prospect of success. Dr. Poulet, of Planchet-les-Mines, has for many years made use of nitrate of silver in severe purpura.

ORIGINAL ARTICLES.

THE ABORTIVE TREATMENT OF ACUTE CATARRH OF THE NOSE AND THROAT.

BY SETH S. BISHOP, M. D.

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Several years ago I experimented in the treatment of acute coryza with a remedy that had proved most effective as an abortive and palliative in hay fever. The results were so eminently superior to any that were obtainable from the classic methods of torturing patients out of a "cold in the head" that I have never since been reproached with the ancient opprobrium "a doctor can't cure a common cold."

In a recent number of the *Journal of the American Medical Association* I saw a paper on this subject, a portion of which, I may remark, was taken verbatim from my essay on Hay Fever, published in the same journal two years ago, the writer forgetting to give due credit for the material borrowed from my work, but stating that he could abort acute nasal catarrh in from two to four days. We can do much better than that. We can limit ordinary attacks to a few hours, and severe attacks to a day or two, and so far as actual suffering is concerned, we can reduce it to a minimum within an hour. Further than that, instead of putting patients to bed, drenching them with hot drinks, and the debilitating sweating ordeal, we can cut short the attact without inconveniencing patients to the extent of interfering with their work.

The treatment is the same that I recommended in a paper read before the United States Hay Fever Association at Bethlehem, N. H., in 1887, on pages 6 and 7, as

Better than all other drugs, in my experience, has been a combination of morphia and atropia in easily devisible compressed tablets. Not more gratifying results could be expected from palliative treatment than I have obtained from this. For several years past I have rarely employed morphine in my practice without administering atropia with it, believing that the antidote should go with the poison. The relative proportions that have proved so satisfactory are $^1/_{100}$ grain of atropia to $\frac{1}{2}$ grain of morphia, in divided doses. A larger proportion of atropia given repeatedly is likely to cause a temporary dimness of vision. If carefully adapted to any given case, I do not believe one need fail to prevent an attack or modify one already begun. Where I have been able to administer the remedy myself in the early stage of hay fever or of acute nasal catarrh, I have never failed to prevent the development of an attack, or at least materially abridge it. If the impending attack is a light one, $^1/_{16}$ or $^1/_8$ grain of the morphia should be given at the first premonition. If the symptoms disappear, that suffices. If they return after a few hours, the dose should be repeated, and in this way the paroxysms should be entirely prevented. If the threatening attack promises to be a severe one, I give $^1/_6$ or $^1/_4$ grain of morphia, with the atropia always, and I have found it necessary in a profound seizure to give $\frac{1}{4}$ grain before the trouble could be subdued. Minimum doses may be better as a rule, but in this malady the reverse is often true. When a small dose may not prevent suffering, a little larger one, to produce a decided impression on the nerves, may be completely successful. Those who are conversent with the physiological action of these drugs will readily appreciate how perfectly this remedy meets all the indications for treatment. It relieves excitability or oversusceptibility, and arrests the flux.

If these rules are observed in administering this remedy, and if the preparation is reliable and accurate, we can produce similar results in acute nasal catarrh. I do not say the same results, because we have a factor in one that is absent in the other disease. In veritable catarrh there is an incipient inflammation, while in hay fever, even when uninfluenced by treatment, the tissue changes and products of inflammation are absent. One is an inflammatory catarrh, the other is a nervous catarrh. But in the initial stage of acute nasal catarrh the conditions that obtain are similar to those characterizing hay fever. There is loss of power of the inhibitory vasomotor nerves, distention of blood vessels, transudation of serum, decreased, and later, increased activityof muciparous follicles, hyperæsthesia of the end organs of the sensory nerves, swelling of erectile turbinate tissue, stricture of nasal passages, sneezing, lachrymation and exalted sensitiveness of the surface of the body to cold, etc. During this stage, which appears to be identical with hay fever, and before the tissue changes of inflammation occur, the treatment that succeeds best in hay fever is the most efficacious here. The treatment should be abortive. It should be preventive, in that it should arrest the progress of the attack before it reaches a stage of actual inflammation. That it can do this is proven by analogy and by fact. In hay fever we have all the apparent features of an incipient inflammation, that is irritation followed by congestion, but terminating in resolution before any destruction of tissue occurs. This treatment has demonstrated its reliability in preventing the development of threatening attacks of hay fever, and in arresting attacks after they had set in. Reasoning from the analogous conditions presented in the two diseases, I was led to adopt the hay fever treatment in acute coryza, occurring in patients who were not hay fever subjects, and found that during the dry and mucous stages of the disease it possessed advantages vastly superior to any other treatment I had ever used; and I have tested nearly everything prescribed by good authority from Hippocrates down to Davis.

Three important factors must be observed in order to be successful with this or any other abortive treatment. First the remedy must be administered early enough;

next, the dose must be sufficient, and lastly, the preparation of the remedy must be accurate and reliable. The last requisite is so obviously important that I think I owe it to you to designate the particular preparation, and the only one, indeed, that I have found invariably reliable. In doing so I want to emphasize the fact that I have always guarded against lending my name to medicine manufacturers for advertising purposes. The most convenient, reliable and mathematically accurate form I have ever found is a soluble hypodermic tablet compressed by John Wyeth & Brother, of Philadelphia. I am justified in specifying because I have utterly failed to produce the same effects with other preparations claimed to be identical with this in material and combination. I give it like a pill, and find it best to use the same tablet continuously in practice. The one containing ½ grain of morphia and $^1/_{100}$ grain of atropia sulphate is the most convenient. It can be easily subdivided into halves, quarters or eights with the penknife, or into the minutest possible doses for children, by dissolving one, or a fraction of one, in any desired number of teaspoonfuls of water. In this way it is as easy to administer $^1/_{50}$ or $^1/_{100}$ grain of morphia as it is to give a larger amount. Children, being more frequently subject to visitation of coryza than adults, whose powers of resistance are greater, we need a remedy that combines positive success with ease of administration and absolute nicety in dosage. In this one we have these requisites. With the utmost facility we maycut short a distressingly severe attack of acute coryza, even in a little child, by giving a minute portion of this tablet dissolved in a little sweetened or flavored water, that will be taken through a tube and rubber nipple used for milk-feeding. I have often prevented a siege of inflammation of the nasal cavities, and perhaps of the throat by giving $^1/_{20}$ or $^1/_{40}$ or $^1/_{60}$ of a grain of morphia in this way. We can do more than prevent suffering from inflammation of the nose and throat by this means, for who can say that an inflammation once established in the upper respiratory tract will not invade the ear or larynx, the bronchial tubes or lungs.

Let us look at one case chosen at random out of many, illustrative of the rapidity with which this remedy produces the most gratifying results.

An opera-singer visited my office and announced that she had the "Chicago grip. Our surprise was mutual when I confessed to ignorance of the meaning of the term. "Don't you know what the Chicago grip is?" she replied. "We all have it when we visit Chicago. We take cold and sneeze, our eyes water, our noses run, our throats are affected, and we sing at a great disadvantage. Whenever we are at Chicago or Pittsburg we expect to have this trouble, and it is known among professional singers as the "Chicago grip."

I found her suffering from acute naso-pharyngeal catarrh and irritation of the vocal cords. Immediately I administered ⅛ of one of the tablets mentioned, representing $^1/_{16}$ grain of morphia and a proportionate amount of atropia. I gave her several eighths of the tablet also to take with her, to use if occasion should require. She reported the following day that she was well. The first dose stopped the nasal discharge within an hour, and opened the nasal passages so that she could breath easily through them. At the afternoon rehearsal she felt some irritation of the nose and larynx, but she took another dose, which relieved her completely, and in the evening she was able to sing without any inconvenience to the end of the opera. She did not experience any of the hoarseness that characterizes the effect of morphia on some persons. She had no further trouble for several days, when she had another attack of the "grip." One dose of the same medicine stopped it at once, and she had no recurrence of the trouble during the stay of her company in Chicago. Of course I did not tell her nor do I inform any patient as to the composition of the tablet, in order to avoid the possibility of a habit being formed.

It is unnecessary to consume more time in portraying numerous cases in which my experience with this remedy has been as satisfactory as in this one. But what a contrast to the torturing treatment of the past!

I have not mentioned the question of local treatment, for that may not be required if you attack the disease early enough. If the attack is advanced or severe enough to call for topical applications, a spray of liquid vaseline alone, or in combination with five or ten per cent of oil of eucalyptus or oil of tar will very materially aid in protecting, soothing and healing the membrane. I am of opinion that we should follow closely the methods employed in this treatment in medicating the nose and throat. In the various forms of eczema we find ointments, soothing, astringent and slightly stimulating, to be the most corrective. So with mucous membrane when inflamed, the most grateful medicaments are of an oleaginous nature. They remain longer in contact with diseased surface and afford the medicine a much more favorable opportunity for action and protection.

If the throat is invaded the efficinal preparation of glycerine or tannic acid, thoroughly applied every two to four hours, will allay the inflammation more promptly than other remedies. Sprays of liquid vaseline, combined as mentioned for the nose, are excellent; but while the Schneiderian membrane will not tolerate the glycerine and tannin, the throat is much better affected by it than by any other application. I have found that the glycerole of tannin can be projected in the form of a spray by the DeVilbess atomizer. if you heat the cup containing it and the tubes also.

It would be interesting, at least, to enter into a discussion of the reasons why the treatment here outlined so briefly is more successful than any other; to consider the physiological action of these drugs; to study the philosophy and psychology suggested by the one disease mentioned, and the pathology of the other, but my determination to make practicalness and brevity distinguishing feaures of this paper necessitates a period at this point.

CLINICAL MORPHOLOGY VERSUS BACTERIOLOGY, WITH SOME THERAPEUTIC DEDUCTIONS.

BY JOHN ASHBURTON CUTTER, M. B., B. SC., NEW YORK.

Read before the Mississippi Valley Medical Association, and Illustrated by lantern slides of Microphotographs, Sept. 11, 1889.

[CONCLUDED FROM PAGE 266.]

"MORPHOLOGY OF THE BLOOD IN TUBERCULOSIS."[1]

"FIRST OR INCUBATIVE STAGE.

"Red blood-corpuscles are less in number, ropy and sticky, more or less, but not much changed otherwise.

"SECOND STAGE OF TRANSMISSION.

"RED CORPUSCLES.—Color pale, non-lustrous; not clear cut, not ruddy. Consistence, sticky, adhesive. Coating of neurine removed. Not so numerous as in normal blood. Owing to the increased size and strength of the fibrin filaments and the stickiness they form in ridges, rows, but not so marked as in rheumatic blood. They accumulate in aggregations of confused masses, like droves of frightened sheep. They adhere to each other, and are rotten, as it were, in texture.

"WHITE CORPUSCLES.—Enlarged and distended by the mycoderma aceti or spores of vinegar yeast that are transmitted into the blood stream from the intestines.

"SERUM.—More or less filled with the spores of mycoderma aceti or vinegar yeast. These occur either singly or in masses of spores, which is the common form in which they are found, wherever vinegar is produced.

"THE FIBRIN FILAMENTS are larger, stronger, more massive than in health, and form under the microscope a thick network which is larger, stronger, and more marked in direct proportion to the severity of the disease or the amount of the accumulation.

"Besides the serum is apt to be of a dirty ash color.

"The sticky white corpuscles, the massive fibrin filaments in skeins, and the yeast spores alone or combined form aggregations, masses, collects, thrombi and emboli which block up the blood-vessels of the lungs soonest, because exposed to cold air the most of any viscus; the blood vessels contract and thus arrest the thrombi and form a heterologous deposit, which is called tubercle.

"THE THIRD STAGE OR STAGE OF TUBERCULAR DEPOSIT.

"These deposits increase so long as vitality subsists in the tubercle and surroundings. When vitality ceases, the tubercle softens or breaks down. Sometimes, if the process is very slow and life slightly inheres in it, the proximate tissues undergo fatty infiltration, which preserves it from readily breaking down.

"The morphology of the blood is the same for the second and third stages of consumption.

[1]See Clinical Morphologies, E. Cutter.

"FOURTH STAGE, INTERSTITIAL DEATH.

"Morphology of the blood in this stage is the same as in the second and third, save that it becomes more impoverished.

"THE WHITE CORPUSCLES are fewer in number, more enlarged, often ragged and rough. Distended with spores of mycoderma aceti; more adhesive and sticky.

"THE RED CORPUSCLES are thinner, paler, much lessened in number, increased in adhesiveness, stickiness and poverty; devoid more or less of neurine.

"THE SERUM.—Fibrin filaments are thickened, stronger, more massive, and more skeins of them present. The collects of mycoderma aceti are very much larger and more numerous; in moribund cases I have seen them so large as almost to fill the field of the microscope. They present anfractuous edges and amoeboid prolongations, giving them a weird, bizarre appearance which, under the circumstances, have a portentious aspect, for the larger and more numerous the spore collects of mycoderma aceti are, the more dangerous the case.

"THE MORPHOLOGY OF THE BLOOD IN FIBROUS CONSUMPTION.[2]

"Here the mycoderma aceti or vinegar yeast does not get into the blood and change it, as in tubercular consumption, since the pylorus keeps the vinegar yeast in the stomach. There is breaking down of living tissue to a less extent. This tissue has been thickened, hardened and made stony from deposits of gravel. The diagnosis is not so easy as that of tubercular consumption."

It was only three weeks ago that I started a case of fibrous consumption on treatment; there was more or less of the yeast in the blood, but the marked point was the great huddling together of the corpuscles; the masses were so great that it was hard work to find one distinct red corpuscle as they were nearly all included in these large masses; no wonder that this woman's heart had to work hard to pump that blood through the vessels. In this case, which was a typical one, there was no trouble with the bowels, but, as she said, all the trouble was from her stomach up. It will take time to get this woman's stomach washed out and all the fermentation rid of; her present food is whites of eggs, Johnston's beef extract, beef essence and milk warm from the cow. She takes hot water before meals and nourishment every one or two hours; her stomach has been a distillery and yeast pot for years, and as the fermentation decreases she misses the alcohol, but the incident weakness soon passes away.

It is wonderful to see in her case, as others, how soon the cough begins to lessen, due to the stopping of the production of the carbonic acid gas, which by its paralyzing action on the mucous membrane of the trachea and the lungs, has caused that pouring out of mucus. (I would that I had more time to go into the description

[2]See Clinical Morphologies.

of the rationale of the production of these diseased conditions in rheumatism, asthma and consumption, tubercular and fibrous.)

When the stomach becomes sweet and is restored to something like its proper tone, she will be fed on beef prepared as described further on.

"Morphology of the Sputum in Tuberculosis.

"Bacilli, bacteria, so-called, clots of blood, elastic lung fibers, epithelia, ciliate, non-ciliate, pavement and columnar, granular tubercular matter, granular tuberculous matter, so-called, sometimes fœtid in odor; inelastic lung fibers, lumina of blood vessels, mucous corpuscles, normal, deformed, distended with spores and gravelly matters; mucous filaments and fibers, mycelial filaments, swarms of spores, yeast plants, yeast sporangia, alcoholic and lactic acid."

Comparison of Clinical Morphology and Bacteriology as to Tuberculoses.

Etiology. The bacteriologist claims that the tubercle bacillus is the cause of tuberculosis. We are willing to admit this, but that it is half the truth. What, then, is the relation of the tubercle bacillus to the vinegar plant?

Botanists have been fighting for years over this question—when Koch was a boy. Some say that it is the baby stage of the vinegar yeast plant, and can be propagated in that stage; Koch has demonstrated that the bacillus will multiply as itself. But the bacteriologist is terribly at task to find out how the bacillus gets into the lungs. The clinical morphologist has no trouble at all; he holds that the vinegar yeast spores are absorbed from the bowels by the partially paralyzed villi; that these spores are transmitted to the lungs and form by their chemical and mechanical action tubercle; then when the tissues are undergoing decay and the cough has come on, of course will the bacteriologist find in the sputum *the bacillus*; but he need not work so hard at staining but had better pay more attention to the detection of the broken down tissues of the lungs so that he may know the actual progress of the case as to lung healing or death.

Again, the bacteriologist can do absolutely nothing at diagnosticating pretuberculosis, yet we are doing the work of detecting the vinegar yeast in the blood before the lungs have necrosed; comparitively speaking, it is as easy as turning over the hand to clear the blood of the tubercular taint. I shall feel amply repaid for my journey of two thousand miles if some of those here will recognize the vital importance of knowing the morphology of pretubercular and tubercular blood and using it daily in their practice.

A gentleman said to me not long since that he had studied blood and could make nothing of it. I answered, "You went to a medical college to be taught how to study medicine; my father sent me to an institution where I passed through a course of four years' duration and was graduated in the sciences. I then spent three years in a medical college, and it was only after I had received my diploma in medicine that he would consent to teach me the various morphologies, as he believed that I must first be well grounded in general science, anatomy, physiology, chemistry, histology, pathology, materia medica, medicine and surgery, before I should receive any instruction in clinical morphology." The same rule he applies to his students; he will teach only graduates of medicine. Dr. R. J. Nunn, ex-president of the Medical Society of Georgia, traveled in Europe, and was unable to find out these special things till he returned to America and took my father's course. Clinical morphology has had no backing from the medical colleges; bacteriology has; clinical morphology gives a rational exhibition of the cause of consumption; bacteriology does not, for it only goes half way and thus antagonizes thinking men; half a truth is often worse than nothing, as false deduction can be based on it.

Contagion.— I do not accept all that the bacteriologists have to say of contagion; if they will study *what the cases eat* they will get more light.

Diathesis.—There is undoubtedly a consumptive diathesis. Yet the heredity question is another one. I am a young man, but it is my father's experience that children of tuberculous parents, fed properly, with no fermentation of their food, do not die of tuberculosis, but live to grow up. It must be remembered that the scrofulous taint comes as much from syphilis as from tuberculosis. Both are easily diagnosticated and should be treated and eliminated.

Therapeutics.—We all aim to be therapeutists. Beautiful diagnoses obtained by scientific methods of examination are very nice, but if they do not cure the case—that is, the treatment based on them, then are we at fault. It's a hard thing to say, but unless we constantly hold therapeutics before our eyes our profession will become nothing but one of scientific amusement.

1881.—A young man lay sick in bed of emaciation, so great that he is about a skeleton; of hemoptyses, so frequent that counting them has ceased; of night sweats; of copious expectoration which contains elastic and inelastic lung fibers; the heart is enlarged; the pulse 120; respiration 20 and more times a minute; in both lungs are cavities; the blood presents the tuberculosis morphology. Now this case, desperate as it was, was undertaken by my father; the patient was fed on beef taken from the top of the round; from it was separated, by machines, the fibrous tissues; the resultant pulp was moulded carefully into cakes and broiled; great care was taken in all of the steps of the process of preparing the beef; the hands touched it as little as possible, for even after the pulp has been separated from the fibrous tissues, then touched by the hand, the animal heat will be apt to change the condition of the meat; so it is moulded carefully with knife and fork.

The meat is then broiled and seasoned to taste with pepper, butter, lemon juice and salt as wanted; Worcestershire sauce is allowed.

The patient is fed this three times a day; is given

gentle tonics; is bathed twice a day with ammonia or acid sponge baths; the case has to be watched for life is apt to slip away at any moment. He gradually improves and is cured, *i. e.*, the cough ceases, the sweats are gone; he arises from his bed, he goes through college, he is graduated with honors, is married and was last seen by us one year ago and calls himself a well man. Now what is the rationale of this case? By feeding him this particular food, the vinegar yeast was starved out of the blood and thus its work of necrosing lung tissue was stopped; the acidity of the blood taken away by stopping the acetic acid fermentation, the fibrin filaments lose their large size, the red blood corpuscles regain their normal tone and color; they are no longer massed together, and the white corpuscles come down to normal size because the blood has been deprived of the spores of vinegar yeast, which they have been trying to enclose; now, nature is a spiral spring, and in this case has been overloaded with wrong feeding; we have given her a chance by feeding the patient by the food that best agrees with her, and she, being furnished with good blood, her eliminative glands in good condition, takes that normal blood and with her wonderful physiological means, heals over the sore and broken down places in the lungs, and in some places, if the cavities are not too large, will build over small places and bridge them across. I believe this to be true, for I have been with a case where I could hear the air bubbling through the mucous in small cavity and yet that all disappeared.

There is so much said about the non curability of consumption. My father was nearly ostracised when he came out in 1880 with 70 cases published in the Transactions of the American Medical Association; here he simply claimed that consumption was a curable disease; his cases in this table were 17 non-arrests, 26 partial arrests, and 27 permanent arrests. It is perhaps well to know that this was all before Koch promulgated the tubercle bacillus and with this article were printed microphotographs of tuberculous blood.

Now it is reported that in the morgues of the great cities of the world, like Paris and New York, bodies are cut into, in which are evidences of lung necrosis which has been stayed, the lungs healed or scarred and the individuals are dead of something else.

Moreover, surgeons are talking of removing by pneumectomy, untold portions of the lungs, and in a journal I recently saw that a man could live with but two lobes; well, supposing the patient has survived the shock of slicing out a part or whole of one lung, he will continue to live on the food that produces tubercle; these facts apply to tuberculosis of the joints and the peritoneum as well. In a case of tuberculosis of the knee, I found the morphology of the blood to be tuberculous and syphilitic. Gentlemen, the medical, the trophologic, the food side of these questions must be examined as well as the surgical.

In our work we never say we are going to cure a case, for we recognize the fact that we are human, finite; but we do know that cases have been cured, and so we will not take away a sufferer's hope. We never know how a case is going to turn out; some cases will not respond to treatment for they are just full of the disease, both lungs; but others come along that appear just as desperate and we give them the chance and they pull up and get well. It is my opinion that too much of evil prognostication is made; to be sure, we are continually pressed down with the weight of suffering people, and we know something of the uncertainty of life; yet every man in this hall to-day knows that cases for whose lives he was fighting with all the strength he had, believing that the end would be death, have agreeably surprised him by living. It is a remarkable thing to me to see cases of tubercle of both lungs, live and live with the most desperate symptoms. I had this recently exemplified in a case which had been sick for several years, with disease in both lungs; she hated the treatment; while she lived on it faithfully she got better; but she could not control her appetite long and so finally died; yet the length of time that this woman lived was remarkable. In the same town was a friend of hers sick in the same way at the same time, only she was tormented with uterine disease; but her lungs have healed because she not only followed directions carefully, but accepted the situation and blamed no one that she had to deny her appetite.

I had a case in Kentucky; we healed her lungs several times and would send her home, and there she would get upset; once she had to go into the kitchen and cook; this brought on an attack of meningitis which shattered her nervous system, so that her character was changed from that of a bright happy woman to one despondent, nervous, irritable. Yet she lived for over a year after that meningitis, though I was constantly told that she would die; for seven months before her death she never coughed. I took her to her family physician two months before her death and he admitted that her lung was healed. She died two months later; incidentally from malaria; generally from adynamia.

Gentlemen, it takes nerve force to live; it takes nerve force to get well; each time that this woman's lung broke down she had to use up nerve force to recover; if she had not been shattered by the meningitis, humanly speaking, she would be alive now. (See On the Death of a Cured Case of Tuberculosis Pulmonalis, J. A. Cutter, *Virginia Medical Monthly Pictorial*, September, 1889.)

Five years ago, a middle-aged lady came under treatment for fibrous consumption, Bright's disease, as diagnosticated by the presence of casts, fatty epithelia and albumen in the urine, and a small fibroid tumor of the womb. She was dieted rigidly for six months, then other foods were gradually brought in; the cough ceased; the urine became normal and the tumor seems to have found business elsewhere, at any rate it is no longer at the fundus of her womb; cannot be found. This is not the first case of uterine fibroid tumor cured by food; as a rule we use galvanism and food together as the case indicates.

I might give you the details of many more cases of tubercle but time does not permit; suffice it that I say the cured cases run back into the 60's, that we consider tuberculosis curable and our belief is that as soon as the profession and the laity will share this belief and practice to cure, then many more lives will be saved.

This taking away of hope kills many. How can a man live if there is no hope offered him; if he does, it is by sheer pluck and fight. But the fight which my father started in on years ago to prove that consumption is a curable disease seems to be about over; we are entering on a new era in medicine; nutrition of tissues must be studied; the causes of tumors, the excessive development of the fibrous tissues, the causes of the degenerations, all these must be studied from the side of nutrition.

A few words as to bacteriology. We all know that it does not cure its cases so my task would be very easy if I only relied on the cures; but I wish to go further back. The bacillus was photographed in 1876, when my father was at that work; but less attention was paid to it as he was working on the blood as the changes in it came before there was any sputum to examine; in the light we now have, the genesis of the yeast plant may be characterized as bacillus, spore and in the full development, the mycelial filaments; from the sputum of consumptives the vegetation has been developed to the mycelial stage; in the blood the mycelium is not so often found, the spores being the ever present form in tuberculosis. (See Food or Bacillus in Consumption, Opur 286, E. Cutter, *Virginia Medical Monthly*, December, 1888).

A few words as to food in tuberculosis: The yolks of eggs are not allowed in any form, because hard to digest and a promoter of rheumatism; if you do not believe it try them on a case and see the result; milk is commonly called the best of foods, yet in the adult nine times out of ten it is not the best, as it so often causes biliousness; this we see in studying our cases; testing the urine with nitric acid helps very much to show the biliousness; milk, if given to patients, must be taken warm from the cow and be carried to the patient speedily so that the ever-present germs may not get into and contaminate it. But be careful in its administration; I have seen cases that I thought could take milk, upset by it.

Some cases are kept alive on the whites of eggs, slightly cooked; beef tea; Johnston's Extract of Beef. Sometimes the stomach is in such a condition that the patient has to be sustained by the nourishment per rectum till the stomach comes around. But the aim in our cases is to get the stomach in such a condition that they can be fed beef prepared as before described. When the blood becomes normal, the urine flowing with a specific gravity of 1015 to 1020 with no bile and sediment, then other foods can be brought in cautiously; and it is only necessary for me to say that if you are watching the case carefully you will soon find out whether the food you are allowing is the best or not. Again, time is a great consideration with these cases. They must be treated by the month; pay their fee in advance; must go under your care for at least one year; better two; the specimens of blood, urine, feces and sputum often examined. Have the patient put his hand in yours and trust you faithfully, make him stop introspection, and watch to see that causes of worry are removed.

Temperament needs consideration; some cases need much encouragement, others holding back; some are fearful of everything and everybody and have no faith; others expect to get well right off and go at the treatment with a rush, and when they find that nature takes her own time in healing his sins, he may be disappointed.

It is no easy thing to take a case chronically sick and lead him along to health. Again, while remembering that without proper feeding, you cannot cure your case, do not forget that with judicial medication the case may be pushed along faster, for the machine needs oiling. Have the case drink hot water one hour before meals and on retiring; usually a pint is needed at each draught. the temperature not boiling but comfortably warm. See The Therapeutical Drinking of Hot Water, by E. Cutter, N. Y.; address the author. Do not give them any Medicine made up with syrup. I have been asked so many times: "Do you give syrup of hypophosphites?" The answer: "No, because there is fermentable matter in it."

In closing, gentlemen, I call your earnest attention to the need of large bodies of medical men, who are deeply anxious for truth, investigating the original experiments of Salisbury, which he made on men and animals thirty years ago. Our work has been more with microphotography and demonstrations of healthy and diseased morphologies. We have not had the time or money to hire men to eat certain kinds of foods, singly, and study the effects on them; neither to buy hogs and feed them to death on distillery slop. But all this must be done; and if this association with its personel of scientific men, industrious and anxious for therapeutical achievements, will appoint a commission and investigate these matters thoroughly, a great good will be conferred. We must know the truth. The matters ought not to rest on the utterances of one or two men. While I am satisfied as far as I have gone in the matter, and believe my father to be on the right track in his efforts to save these things to the profession—for the profession is the body that stands between the people and death, and no one man should set himself up as a healer, and that he must hold all knowledge. I am also deeply anxious that these experiments be repeated.

A commission to undertake this work must be composed of your most eminent members; it should contain a first class chemist, a neurologist, a pathologist, a therapeutist, and last, but not least, a morphologist. This work of the commission must not be hampered by the appointment of a man to do its microscopical work who is trained only in bacteriology; I believe I have shown you to day that bacteriology is but an extremely small portion of the microscopical world, and that the profession will be

handicapped until the word ceases to exist and the bacteriologists of to-day become morphologists in order that they may cover the whole field.

Gentlemen of the Mississippi Valley Medical Association, I thank you very earnestly for your kind attention.

Broadway and Fifty-fitfh St.

REPORT ON PROGRESS.

MICROSCOPY.

BY WM. N. BEGGS, M. D., ST. LOUIS.

New Method For Demonstrating Sarcolemma.

Bernhard Solger (*Zeitschrift f. Wisseutschaftliche Mikroskopee*) gives the following method for demonstrating the sarcolemma.

Fresh pieces of the thigh muscles of a frog, a few mm. long and as thin as possible, are cut out with curved scissors. These are immersed in a cold saturated solution of ammonium carbonate for 3 to 5 minutes and coarsely teased out. They are then transferred to a glass slip and further teased out as much as necessary. They are examined in the same fluid.

The sarcolemma appears on most of the fibers as flat blisters which are often clearly separated from the fiber through an entire field. It is shown better in freshly caught animals than in those which have been some time in captivity.

A New Cement for Glycerine Preparations.

Dr. S. Apashy says the advantages claimed for this cement are:

1. It is not necessary to apply a circle of wax.
2. It does not run under the cover glass.
3. It adheres to the glass readily.
4. It hardens without becoming brittle and therefore does not crack or spring off the glass.

The cement consists of equal parts of hard paraffin (melting point 60°C.) and commercial (common) Canada balsam. They are melted together in a porcelain vessel, and heated over a moderate flame until the entire mass has a golden yellow color, and *no more turpentine fumes arise.* When cooled, this mixture forms a hard mass. This must be warmed before use. It is then applied by means of a glass rod, or better still with a small metal spatula. After the circle or border is completed, the heated spatula is again passed over it to make its adhesion certain. It may be cast into small tapers for convenient use, if only a few preparations are to be furnished at one time.

Osmic Acid Preparations.

Prof. W. Flemming of Kiel, has been experimenting as to the solubility in various media of fat fixed with osmic acid.

A small piece of tongue was fixed in the dark in 3 cc. of a 2% solution of osmic acid for a day. They were then washed 4 hours in running water. This was then kept eight weeks in absolute alcohol. Thin sections were made and examined under the microscope in the fluids to be tested. Following are his results.

1. Turpentine (exposed to light but not recently to sunshine)	Noticeable solution of the black fat in ¾ of an hour. In 1¾ hours complete solution.
(In chrom-osmium-acetic acid preparations the solution begins and is completed more rapidly).	
2. Absolute ether	In 2 hours beginning solution. In 4 hours complete solution.
3. Xylol (*purissimum* of Dr. Gruebler)	In 3 hours beginning solution. In 5½ hours complete solution.
4. Xylol (as above) in incubator 50° Cent.	In 1 hour beginning solution. In 4 hours almost complete solution.
5. Canada balsam dissolved in turpentine, evaporated until thick, again dissolved in xylol, until syrupy. Section lay in a glass with ½ cc. of the solution.	In 3 hours beginning solution. In 4½ hours complete solution.
6. Gum damar, dissolved in turpentine and chloroform. Section treated as No. 5.	In 1 hour beginning solution. In 3 hours complete solution.
7. Gum damar, as No. 6. Section mounted on glass slip under coverglass.	In 5 hours there is a slight solution of the fat globules, so that these we e here and there surrounded by a slight gray cloudiness. In the course of 24 hours this cloudiness was gradually dissipated until it was no more to be seen. From then on no further solution occured.
8. Canada balsom, dissolved in xylol puriss. Treated as No. 5.	In 48 or more hours no solution noticeable.
Treated as No. 7.	Naturally the same result.
9. Chloroform.	No solution in 48 or more hours.
10. O l of cloves.	The same.
11. Oil of cloves. Incubator at 50° C.	The same.
(Benzole as well as Canada balsam and gum damar dissolved in benzole seem not to have been tested.—Rep.)	

From these results it is shown that mounting media dissolved in xylol are preferable to those dissolved in turpentine for osmic acid preparations.—*Zeitschrift f. Wissent. Mikroskopie.*

A New Staining Method for the Nervous System.

N. Kultchitzky (*Zeitschr. f. Wiss. Mikr.*) gives the following staining method to be used instead of Weigerts' for the nervous system. The staining solution is made by adding 1 gram Hæmatoxylon (dissolved in a little alcohol) to 2 cc. of a saturated aqueous solution of boric acid, and 30 cc. of distilled water. To this a little acetic acid (2-3 drops to a watch glass-ful) is to be added just before using.

Portions of the central nervous system should be hardened in Muellers or Ehrlicki's fluid,[1] and imbeded in celloidin.

Sections are to be stained from a few to 24 hours.

[1] Presumably transferred to alcohol while being washed out.

Then in alcohol, and[2] mounted in balsam. The medullated nerve fibers appear blue, all other tissues light yellow or yellowish red. If placed in sodium or lithion carbonate solution after staining prior to dehydrating, they are prettier. Then the medullated nerve fibers are deep blue, the remaining tissue almost colorless (light gray).

A more simple solution which gives the following results is this:

2% sol. acetic acid, - -	100 cc.
Hæmatoxylon, - - - -	1 gm.

Dissolved in a little alcohol. After treatment the same.

Concerning the Minuter Changes in Bronchitis and Bronchiectasis.

Wilhelm Fisher, in his Inaugural Dissertation, Kiel, says: In the lightest grade of acute bronchitis there is a slight increase in the mucous cells, and leucocytes appear in the mucous and epithelium, but the peribronchitic tissue, or adventitia of the larger bronchi is normal. If the inflammation increases or is prolonged the changes are increased. The beaker cells become more numerous even almost completely supplanting the ciliated epithelial cells. The latter may be greatly compressed. The leucocytes greatly increase in number, and loosen and cast off the epithelial cells either singly or in groups. They often collect in heaps upon the membrana propria and raise up the epithelial cover. In this way patches are found where the membrana propria is bare or covered only with leucocytes. In branchi with stratified epithelium the lower layers are not so readily cast off as the upper, and distinctly proliferate so that three or more layers are to be found. As long as the inflammatory process lasts however, no normal ciliated epithelium is found.

At the same time there is greatly increased cell proliferation taking place in the entire bronchial wall, especially in the adventitia. The infiltration is chiefly marked about the blood vessels which are surrounded by a more or less thick circle of leucocytes. These are often found in the vessel wall, and also in the acini of the glands. The process is not uniform. Here and there it is marked; at other spots the bronchial wall is perfectly normal. In the most severe stages all the elements are concealed by leucocytes, even cartilage and glands being recognized with difficulty. In the larger bronchi small abscesses are also formed, but a rupture of the basal membrana was not observed. There seems to be slight proliferation of the connective tissue elements.

The blood veseels are always distended and the white corpuscles are numerous. The red corpuscles press the elements of the walls apart and penetrate through the membrana propria into the lumen. Small hæmorrhages occur frequently. Lymph vessels often appear as delicate capillaries which are filled with leucocytes.

In the slighter inflammations only slight infiltration of the perichondrium occurs; in the more severe forms the cartilage cells themselves proliferate.

In the glands mucin formation is increased. The lumen is distended and filled with mucin, cast off epithelium and leucocytes.

The lumen of the bronchus, sometimes distended, contains a secretion consisting of leucocytes, cast off and disintegrating epithelium, mucus, detritus and frequently blood.

The changes in chronic bronchitis and bronchiectasis are not so uniform. Indeed no two cases seem to be exactly alike.

Of 23 cases examined 15 in which the age ranged from 24 to 76 years, showed more or less *atrophy* of the *bronchial wall*, the others showing *thickening*. Of the former, one case presented numerous insolated saccular bronchiectases below which the lumen was narrowed. The exceedingly thin bronchial walls consisted of strong connective tissue, in which nuclei were scant, and occasionally a muscle fiber was to be found. Here and there the subepithelial layer was somewhat looses and nuclei were more numerous. The surface was covered, however, by a continuous layer of ciliated epithelium varying in height, but otherwise perfect. Twelve cases show the most varying degree of atrophy of all the parietal elements. All have inflammatory epithelial changes, moderate increase of connective tissue infiltration, and more or less vascular proliferation.

The epithelium is never uniform. It consists of the remains of simple and stratified ciliated epithelium, with goblet cells and deeper lying proliferating cells. More often, however, the cells are polymorphous, covering the surface in groups, now thick, now loose. Occasionally only low flat cells in one or more layers are found. Between these, leucocytes in varying numbers are found.

The membrana propria is generally unusually thick. Beneath this the elastic fibers are diminished in amount. There is almost always a thick net of capillaries. Indeed they are so numerous that almost no other tissue is to be found. They never project as papillary growths into the lumen of the bronchus. Between them is generally a reticular, occasionally striated, connective tissue which is now rich, now poor in cells. Leucocytes are always present.

Generally, the thickness of the muscularis varies exceedingly. Its normal continuity is wanting. It consists of broad or narrow bundles of fibers, many of which show granular (fatty?) degeneration. Between the bundles there is connective tissue, generally showing few nuclei and few blood vessels.

The changes in the cartilages also are varied. The plates are of varying size, now well preserved, now reduced to small fragments. There is always increase of the cellular elements. These are mostly small, two or three in a capsule. Many undergo fatty degeneration.

[2] Whether xylol or an essentiol oil is used for clarifying, is not stated. Presumably xylol.

The margins of the plates are nodular, as if eaten out. In the small depressions lie young connective tissue cells, leucocytes and free cartilage cells. The perichondrium is thickened, the outer portion being dense and poor in cells and blood vessels. Calcification of the cartilage often occurs in patients of all ages.

The groups of glands are diminutive, the acini small, the cells dwarfed, cubical or round. Often are found, as the remains of a group, one or two narrow acini or only the sack-like widened duct. The number of glands varies greatly, as it also does in health.

The adventia is generally thickened. It consists partly of fat, chiefly, however, of very vascular connective tissue containing few cells.

In two other cases the process was different. In these the outer layers were chiefly affected, there being almost a total absence of cartilage and glands. The inner layers were almost unaffected. In both cases there was interstitial inflammation of the lung tissue which had extended to the bronchi.

Five cases of chronic bronchitis and bronchiectasis show thickening of the wall. The mucosa consists of granulation tissue, projecting into the lumen as small, broad nodules. The membrana propria is thick. Leucocytes, capillaries and small hæmorrhages are numerous. Beneath the mucosa is a broad layer of more or less infiltrated, dense connective tissue, containing many distended bloodvessels. In this lie remains of muscle, elastic fibers, cartilage and glands. The proliferation of cartilage cells is not great, and they are almost all of them degenerated. The cartilage plates are more or less destroyed by the perichondrium, which as young, vascular, richly nucleated, connective tissue, penetrates the plates from the surface, divides them into fragments, and, finally, totally supplants them.

In a like manner the glands are overgrown by a vascular, richly nucleated connective tissue which develops about the acini and causes their disappearance, partly by compression, partly by displacement. The glandular cells always contain much mucus. Leucocytes press between them into the lumen which they more or less fill.

Normal epithelium is almost totally absent. It is often replaced by cylindrical or club shaped cells, which often alternate with short or long spindle shaped cells. In some bronchi there is a stratified pavement epithelium of varying thickness. Occasionally purely cylindrical epithelium occurs besides pavement epithelium.

In three cases of chronic pneumonia there was irregularly-shaped, thick-walled bronchiectasis as a result of the pneumonia. In these cases it is difficult to determine microscopically where the bronchial wall ceases. The thickening, however, can be ascribed to the degenerated lung tissue surrounding the bronchi. In these cases also the parietal elements are destroyed by the connective tissue hyperplasia. This is, however, not as luxuriant as in the cases just described. Leucocytes and bloodvessels are not numerous. Mucosa, glands and cartilage undergo the same destructive processes. The epithelium is almost always low, and consists of short cylindrical, cubical or flat cells. Superficial destruction of the mucous membrane is not infrequent.

To Stain the Bacilli in Farcy Nodes.

Dr. H. Kuhne (*Fortschritte der Medicin, Deutsche Medicinal Zeit.*) says: Sections of nodes preserved in alcohol are washed in water. They are stained three or four minutes in a carbolic acid methyl blue solution and then transferred to acidulated water. To prevent subsequent decolorization they are well washed with water, and then placed for a moment in alcohol. They are completely dehydrated in anilin oil, to which a few drops of turpentine have been added. They are then placed successively in pure turpentine and xylol, and mounted in balsam. Nuclei are not stained.

Treatment of Umbilical Hemorrhage in Infants.—The author, Dr. Dakin, describes in this paper a method for arresting hemorrhages from the umbilicus in newly-born children.

It consists in underrunning the umbilicus arteries with a harelip pin or long needle, in the following way: In the intervals of taking breath, when the abdominal walls are lax, about an inch of the abdominal wall, exactly at the level of the lower edge of the umbilicus, is included between the thumb and finger.

At this point the hypogastric arteries can be felt to slip within the grasp. If the attempt is made even a quarter of an inch nearer the pubes the arteries will slip away, as they are too deep to be included in the pinch.

The pin is then passed beneath them. There is no danger of wounding the intestines, as these are pushed down by the tightly-opposed finger and thumb.

By experiments on the dead infant, the author has found the pin to enter the abdominal cavity about the sixteenth of an inch.

The hemorrhage usually ceases at once; but if it comes from the vein, a figure-of-eight ligature about the pin will at once arrest it.

The two main points are to make sure the artery is underrun and not transfixed, and that the ligature includes all the umbilicus.—*Lancet*

Lauder Brunton on the Suspension Method.—Dr. Lauder Brunton, in one of his lectures on "The Relation between Chemical Structure and Physologica Action," refers to the remarkable benefit obtained from suspension as one of the most striking discoveries that have been made in therapeutics in recent years. He finds all explanation of it very difficult, but is inclined to think that suspension merely acts on the cord in the same way that massage does upon the muscles, by removing the lymph, and with it the products of nerve waste; while at the same time it may increase the processes of oxidation, and repair by free circulation of the blood.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,

EDITOR.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

Communications relating to subscriptions and advertisements should be addressed to J. H. CHAMBERS, 914 Locust Street, St. Louis.

Original Articles, Reports of Cases, Correspondence, etc., relating to interesting medical topics, are cordially invited.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, OCTOBER 12, 1889.

THE EFFECT OF THE ENTRANCE OF AIR INTO THE CIRCULATION.

The entrance of air into a vein has always been regarded as a most formidable accident during an operation, leading in most cases to fatal results. A similar accident in the case of an artery has been thought to be equally serious. Several cases of sudden death after delivery have been ascribed to the entrance of air into the uterine veins, but the locality the most to be feared has been said to be the root of the neck and axilla, where wounds of the large venous trunks are apt to be accompanied by the most fearful consequences.

The cause of death in these cases has been variously explained; Erichsen believes that the frothy condition of the blood produces an insufficient supply to the brain, inducing death by syncope. Bell believes that death was caused by the direct transference of air to the base of the brain, while Cormack attributed it to paralysis of the right side of the heart from gaseous distention. Various other opinions have been expressed, but the question is still obscure and unsettled.

Dr. H. A. Hare, in the *Ther. Gaz.*, has recently carried out a series of experiments on over seventy dogs, the results of which go to show that there is by no means so much danger as is thought, and that air on entering a vein is not capable of exerting deleterious influences. He states that the quantity of air injected into the jugular vein varied from a minute bubble to forty cc.; that the rapidity of injection was almost instantaneous, that the dogs were of all ages, sizes, breeds and states of health, anæsthetized and non-anæsthetized, and that every possible precaution was taken to insure correct results. Air entering the jugular vein in every quantity, up to far above the amount that might enter because of a wound, gave rise to no untoward symptoms whatever; the only change noticed was a slight quickening of respiration for about a minute after the injection. With the carotid artery, however, it was far different.

"When air in as large an amount as twenty cubic centimetres is injected into the carotid artery, in from one-half to one second, respiration ceases at once, unconsciousness asserts itself, and the animal is apparently dead, save for the action of the heart, which keeps on as if nothing had occurred. In a moment respirations are renewed, the breathing becomes at first more powerful, then less and less so till death really ensues, a result which can be indefinitely postponed provided artificial respiration is kept up. Sometimes the animal begins to breathe voluntarily and lives independently of any such aid; in others he dies at once when the artificial respiration ceases."

His theory is that air entering the veins is expired on reaching the lungs, unless the quantity is so large that part of it reaches the left side of the heart, when death ensues from the formation of emboli, and that air entering the arteries cause this result at once. From his experiments he draws the following conclusions:

1. Death never occurs from the entrance of air into the ordinary veins of the body unless the quantity be enormous—from one to several pints, a quantity which cannot enter unless deliberately sent in by the surgeon.

2. The cases on record have been due to other causes than air, and have not been proved.

3. The tendency of the vessels to collapse, and the leakage of blood, prevent any entrance of air, and it would seem probable that a clot has generally caused death, not the air itself.

The paper is a valuable contribution to the literature of the subject. It is not stated whether post mortem examinations were made on the animals that died; this might possibly have thrown more light on the question.

DRAINAGE OF THE BLADDER AFTER SUPRA-PUBIC CYSTOTOMY.

The question of drainage of the bladder after suprapubic cystotomy is one which presents many difficulties to the surgeon. All of the plans in use at the present time have their objections. Leaving a catheter in the urethra is uncomfortable to the patient, and after a time produces considerable irritation. Where it is left in the wound, passing down to the base of the bladder, it is open to the same objections and is not as effective. So with the other methods, which all have their undesirable feature, combined with varying degrees of effectiveness.

In a recent number of the *N. Y. Med. Rec.* Dr. G. R. Fowler suggests capillary drainage by means of ordinary cheese cloth, and this plan offers many advantages not the least of which are its simplicity and effectiveness. Cloth is sterilized by heat and dipped into a hot milky mixture of zinc oxide or bismuth subnitrate

and water, to which a little glycerine has been added. The zinc oxide and bismuth subnitrate are used for their antiseptic properties, and are at the same time non poisonous and non-irritating. The cloth, either in squares or in strips two inches wide, is then wrung out and placed in a sterilized fruit jar until required for use. Any sterilized gauze or cotton wicking will answer the purpose if changed frequently. The gause is loosely packed into the bladder at the *bas-fond*, about two or three inches being allowed to project out of the wound. The projecting end is then laid upon a large towel, made into a compress, or a piece of rubber mackintosh, which is so disposed as to carry off the urine to a basin placed beside the bed. Should the fear arise that the wound will close prematurely, the gauze may be passed through a short rubber drain of large calibre, which is fastened into the wound to prevent its slipping into the bladder.

The advantages of this method are summed up as follows: It is simple, effective and clean. It allows the patient to assume any position most comfortable to him. It is not easily displaced and its action is not interfered with by any accidental circumstance, such as sudden movements on the part of the patient, etc. It furnishes an antiseptic to the urine, thereby lessening its irritating qualities, and an antiseptic dressing to the bladder walls and edges of the wound at the same time.

A Possible Cause of Post-Partum Shock.

Dr. Ferguson, in the *Edinburgh Med. Jour.*, relates three cases, one in his own practice, in which he thinks the extreme and sudden prostration which occurred was caused by pressure upon the ovary during the expression of the placenta after Crede's method. Sudden collapse of the mother soon after the termination of an apparently successful labor is an occurrence sufficiently common to cause any suggestion as to its cause or cure to meet with a hearty welcome.

In these three cases there had been no great difficulty in labor, no excessive hæmorrhage, no severe operation. Eclampsia and heart disease were easily eliminated. In each there were symptoms of syncope and shock, unconsciousness, feeble, rapid, irregular pulse, sometimes imperceptible at the wrist, dilated pupils, shallow irregular breathing, cold, clammy sweat, vacant, torpid face and absolute insensibility to pain. In eight to twelve hours they had completely recovered, feeling only a little exhausted, and having some tenderness of the hypogastrium; there was no recollection of what had occurred during the attack. In one case there was, following this, persistent sleeplessness with melancholia, from which she also recovered. Dr. Ferguson thinks there can be no doubt that the shock was, in each case, caused by squeezing one or both of the enlarged, tender ovaries between the compressing hand and the hard, contracted uterus, for during the compression exquisite pain was felt, and serious collapse immediately followed. He supports this view by the observation that, during abdominal section for the removal of the ovaries and tubes, if the ovaries are roughly handled or torn before the ligature has been tied, the patient, though anæsthetized, generally becomes affected by shock, the symptoms of which disappear when the ligature is tied.

He shows that in a considerable proportion of cases the uterus, during the third stage and after delivery, lies obliquely in the pelvis, so that the ovaries, which cling closely to its sides, lie, the one in front of the transverse line, the other behind it. We may also, during manipulation, so twist the uterus on its axis as to bring the ovary where it may be squeezed. The fingers which grasp the uterus from behind may, in certain of these cases, very easily squeeze the ovary which lies posteriorly, and he shows how this danger is greater when the patient is lying on her back than when she is lying on her left side. In most cases the compression is slight, and a woman of strong nerves will bear it, even when the ovary is involved, without inconvenience. But where pain is felt during compression, or where considerable force is required, the physician should take care to find how the uterus lies before he applies pressure. Lateral compression of the post-partum uterus should never be used except in cases requiring irrigation of its cavity, when the Fallopian tubes should, if possible, be very gently compressed, in order to prevent regurgitation of the fluid through them into the peritoneal cavity.

Many of the attacks of syncope which occur immediately after the third stage or during it, and which are ascribed to the very slight hæmorrhage which has normally occurred, ought to be put to the account of that energetic and forcible kneading of the uterus and its adherent ovaries which an over-zealous accoucheur thinks necessary to prevent a more or less visionary post-partum hæmorrhage.

MEDICAL ITEMS.

Squelching a Quack.—George Smart, the local diphtheria expert, is about to receive an over-hauling at the hands of the authorities.

An Investigation of Infant Foods.—It is said that the chemists of the United States Agricultural Department are about to begin the work of investigating the different artificial foods and infant foods now on the market.

The Ptomaine of Rabies.—A ptomaine has been discovered in the brains of rabbits dying from hydrophobia, by Dr. W. Andres, who states that one thousand brains contained only $\frac{3}{4}$ gr. of the poison. This ptomaine is capable of producing all the symptoms of rabies. Its chemical composition is as yet undetermined.

Dr. F. D. Wright.—Our friend, Dr. F. D. Wright, of Pierce City, Mo., has gone East to spend four or five months among the clinics.

The "Medical News."—Dr. H. A. Hare has resigned from the Editorial Committee of the *University Medical Magazine* to assume the editorship of the *Med. News*, the first number of which, under his management, appeared October 5.

Changes at the Missouri Medical College.—Dr. Gratz Moses having been granted a leave of absence for one year, on account of ill health, Dr. G. M. B. Maughs will lecture on Obstetrics, and Dr. Geo. F. Hulbert will take charge of the Gynecological clinic during Dr. Moses' absence.

Medicine to the Front.—The corner stone of the New York Academy of Medicine was laid with impressive ceremonies, on the afternoon of the 2nd. inst. Among the notables who assisted, were Grover Cleveland, Bishop Potter, Rev. Dr. Hall, Dr. A. Jacoby and the President of the Academy, Dr. Alfred L. Loomis.

The new building is to cover an area of 75 by 100 feet, is to be four stories and two half-stories high, and will cost $150,000, exclusive of the site.

Caffeine in Adynamia.—Dr. Huchard believes in the entire harmlessness of large doses of caffeine, contrary to the ruling impression that its free use is likely to produce unpleasant cardiac symptoms. His experiments on animals have shown that it acts upon the nervous system before influencing the heart, and he does not hesitate to employ subcutaneous doses as large as 31 to 48 grains. He asserts that the great value of large doses of caffeine, subcutaneously, in all adynamic conditions is unquestionable.

Beaumont Medical College.—We sincerely deplore the loss occasioned by the total destruction by fire of the College and Hospital building of this institution, on the night of the 8th. inst. But we are at the same time gratified to learn that the embarrassment thus caused will be only temporary; that the Faculty is in excellent condition financially, and only awaits the selection of an eligible site to erect a more commodious building than the old one.

At present, lectures and clinics continue according to the regular program, in the large residence building at the south-west corner of 14th and Lucas place.

Phenacetine Poisoning.—We notice in an exchange the report of a case of poisoning by phenacetine. The patient was a woman, æt. 30 years, who had been a sufferer for many years from a chronic pelvic trouble and occasional severe attacks of migraine. For the relief of the latter she had taken antipyrin and antifebrin on different occasions, in 15 grain doses, 4 or 5 times daily, without any characteristic symptoms. During one of her attacks phenacetine was prescribed and after she had taken 3 powders, of 7½ grains each, in 6 hours, she fell into a state of collapse with severe præcardiac pains, severe dyspnœa, great lividity of the skin, lips, nails and conjunctiva; was in a state of great restlessness, with inability to lie down or stand; pulse was soft and slow; cold perspiration was present; pupils somewhat dilated. She recovered from the symptoms in 10 hours after the use of ammonia and alcoholic stimulants, but was not able to get around for over a week.

Effect of the Colorado Climate on Phthisis.—Dr. Samuel A. Fisk, after analysing (in *Boston Med. and Surg. Jour.*) a hundred cases, concludes that the most favorable cases for sending to Colorado, as far as the condition of the chest is concerned, are those in the early stages, when the disease has not made much progress.

Later on, when they have reached the so called second stage, they may be sent with the hope of getting some improvement; but when the disease is very considerable, especially if the condition is marked by impaired appetite and digestion and by hectic and rapid pulse, they had better be left alone.

An Association of French Medical Journals.—A syndicate has recently been formed in France by the editors of many of the medical journals, for the protection of the common and individual rights of its members. In order to become a member it is necessary to be a physician; to be an owner, director, or editor of a medical journal, or delegated by the latter as a representative; to be presented by two members of the association, and to be elected in assembly by a majority of the members after hearing the deductions of a report drawn up by a member other than either of the two who proposed the candidate. The association is governed and represented by three syndics, who are at present Dr. Cezilly, Dr. Cornil and Dr. Rause. Meetings are held three times a year.

A Peculiar Mode of Origin for Puerperal Infection.—The German correspondent of the *Medical Press and Circular* relates a series of puerperal accidents which pursued a midwife, in for a time a most unaccountable fashion. She seemed to have taken every possible precaution to avoid them, washed her hands in carbolized water, changed clothing, etc. Careful and minute investigation by Dr. Loeb, of Frankfort, disclosed finally that the scar of a former lupoid ulcer existed at the right of the ala nasi; Dr. Loeb thought immediately of a possible constriction of the lachrymal duct, or a catarrh of the sac. The constriction was really present, and drops of pus could be pressed from the lachrymal sac. Microscopical examination of this showed the presence of staphylococcus pyogenes, as well as a great numbers of other micro-organisms. The conclusion was easily reached then that, notwithstanding her precautions to avoid sources of in-

fection, she unconsciously carried the infecting material on her hands to the patient.

This case recalls another, reported by Meigs, of an American physician, who, after having a number of puerperal cases in his practice, discovered that the cause was an ozæna, with which he was affected; the route of contagion was from the nose to the handkerchief, thence to the hands, and on them to the patients.

Female Physicians in London.—England is said to have but 73 female physicians, of whom the leading one is Dr. Scharlieb. She was the first woman to receive a medical diploma from the University of London. After residing in India for a time she returned to London where she soon acquired a very large practice. Dr. Garett-Anderson, a Paris diplomee, is another of the leading female practitioners of London. She was instrumental in establishing the woman's hospital in London, and is dean of the school attached t the hospital, and also holds the chair of medicine. This hospital is managed entirely by women, the apothecary and attendin g physicians being women, the consultants only being of the opposite sex.—London correspondent of the *Semaine Medicale*.

New Positions in Operations.—Dr. Dorn, in *Cent. f. Chir.*, states that he has had great success in operating upon the naso-pharynx and posterior nares by placing the patient upon a table with his head hanging backward over the end. The mirror and instruments can be manipulated much more easily than in the ordinary position and the danger from hæmorrhage is greatly lessened.

J. F. Heushis, M. D., in *Med. News*, suggests that in operating upon the vagina, the woman be placed prone upon the table with the legs stretched out straight, and that a thick, hard pillow, or a large book wrapped in a sheet be shoved under the upper part of the thighs reaching to the pubes, so that the pendulous part of the belly shall have room to hang clear of the table. In this way the full benefit of the atmospheric pressure is obtained, and the position is more easily maintained under chloroform than Sims' or Bozemann's position. He has tested it and found it successful. It is useful in facilitating the operation for vesico-vaginal fistula and certain other operations upon the the uterus and vagina.

FROM THE GERMAN.

By W. C. Mardorf, M. D., St. Louis.

Bromoform as a Remedy for Pertussis.

Dr. Stepp, of Nuenberg, has used chloroform internally with success in a number of diseases, and this attracted his attention to bromoform, a drug of which but little notice has been taken with regard to its possible therapeutic value. He has used it in a number of infectious diseases, but with especially encouraging results in whooping cough.

A few data concerning bromoform may not be out of place here. It is a light, clear fluid, with a peculiar but not unpleasant odor. Chemical formula is $CHBr_3$; specific gravity 2,900; easily soluble in alcohol, but difficultly soluble in water; it tastes sweet and does not erode mucous membranes. If evaporated by lamplight powerful bromine gases are evolved, which strongly irritate the mucous membranes of the conjunctiva and respiratory tract. A few drops of it added to urine materially retard decomposition. Bacteriological researches with bromoform have hitherto proven unsatisfactory on account of its rapid evaporation.

It is not poisonous, and its administration has no objectionable features; it has no influence upon the pulse or temperature. Its action is altogether different from that of bromide of potash; it is rather an excitant. From 5 to 20 drops may be given to children daily in from 25 to 30 drachms of water as a vehicle, with a little rectified spirit added, say a drachm to every 10 drops of bromoform. With a little syrup this is readily taken by children. Seven or eight drops two or three times a day in capsules may be given to adults.

The author has used it in 60 or 70 cases of pertussis in children aged from six months to seven years; one case was aged eleven years. He states that complete recovery ensued in all the cases in 2 or 3 weeks, at the most 4 weeks. In the mild cases a decrease in the number and violence of the paroxysms was noticed in five or six days; in the severer cases this result was attained only after 10 or 12 days. He cites the case of an infant aged 24 weeks, who had 30 to 35 severe paroxysms daily; at first, 8, then 15 drops daily reduced the number of paroxysms from 35 to 9 in 8 days, with complete recovery in four weeks. It is worthy of remark that the cartarrhal symptoms on the part of the lungs were in these cases either slight or entirely wanting, and where present rapidly disappeared under the treatment. Even in a few cases complicated with pneumonia a cure resulted in fourteen days. It is also effective in chronic cases; the author gives five cases of several months duration, with rapid recovery under treatment.

The dose must be regulated to suit the age of the patient and the intensity of the affection, and the treatment must be thoroughly carried out and its effects carefully observed. It has a prophylactic effect when given to the persons about the patient, and is effective in the catarrhal stage. Patients do not seem to become accustomed to it, so that it loses its effect; finally, the author is unable to offer any explanation of its mode of action.—*D. Med. Woch.—St. P. Med. Woch.*

Outlining the Kidneys by Percussion.

Dr. L. Riess, *Ztsch. f. kl. Med.*, attaches greater importance to the results of percussion of the kidneys than has hitherto been accorded it; the percussion must

be forcible, and for this reason the percussion hammer is preferable to the fingers; the examination is best conducted in the knee-elbow position. It is necessary to verify results by repeated examinations, as the varying state of fullness of the intestine has a great influence in obscuring the renal percussion boundaries.

In normal conditions the outer margins of the kidney can, as a rule, be determined with sufficient accuracy; on an average it is 8.9 cm. ($3\frac{1}{2}$ in.) from the median line on the right side, and 8.6 cm. ($3\frac{3}{8}$ in.) on the left side. The lower margin, which is not always as clearly defined as the outer, lies at a distance of 2 cm. ($\frac{7}{8}$ in.) from the crest of the ileum on the right side, and 5.5 cm. ($2\frac{1}{8}$ in.) on the left side.

He places a high value on the results of percussion in determining whether the kidney is normally situated or not; this question is of great diagnostic significance not only in cases of floating or otherwise displaced kidneys, but also in other more complicated abdominal diseases, in which we wish to decide whether or not the kidney is involved. He then relates several cases, in which percussion assisted him in making the diagnosis.—*Deutsch. Med. Zt.*

The Influence of Position upon the Physical Examination of the Heart.

Dr. H. Zerhinser, in *Med. Tijdschr. voor Gen.*, states that in young people in changing from the standing to the reclining posture the apex beat moves not only laterally, but also vertically.

This explains why in many persons with normal hearts the apex beat is found in the fifth interspace in the upright position, and in the fourth interspace on lying down. In many youthful individuals there is found dullness over the sternum on lying down, which is confined to its left half and is continuous with the cardiac dullness. In some this disappears on standing up, in others it remains unchanged.

The aortic second sound is frequently weaker than the pulmonary second sound. This generally occurs only on lying down and is more common in ill-developed than in large and robust chests.

Systolic and diastolic murmurs, chiefly mitral, are often found in young people in the course of an acute articular rheumatism, that cannot be heard in the standing or sitting posture,but quickly return when the patient lies down. It is not improbable that in these patients the conditions which govern the transmission of sound to the chest wall are different from those in older individuals.—*Deutsch. Med. Zt.*

Aneurisms of the Arch of the Aorta.

A. Cardarelli, in *Rif. Med.*, draws attention to the diagnosis of those obscure cases of aneurism of the aortic arch, which manifest themselves by a number of seemingly unimportant symptoms, but which with careful attention to the latter and with a more searching examination can be almost positively diagnosed.

Leaving aside those symptoms which arise from the relations of the aneurism to the manubrium sterni, the neighboring venous trunks, the œsophagus and the left bronchus, we have two great classes of symptoms; those caused by the relations of the aneurism to the trachea and the left recurrent laryngeal nerve. Even the smallest aneurisms may cause tracheal symptoms, and changes that are susceptible of recognition. A slight, irritating cough, a small amount of dyspnœa, or a little hoarseness, may in the absence of any known cause or on account of their persistence lead to a laryngoscopic examination, which may reveal either compression of the trachea, its deviation from the median line, or abnormal pulsation of the tracheal rings, any one of which, combined with due attention to the history, and to the general picture of the trouble, may lead to a proper diagnosis. The symptoms on the part of the laryngeal nerve are even more important inasmuch as they may be brought about by very small aneurisms causing but an insignificant amount of pressure upon the nerve; such are symptoms of irritation in the form of a suffocative cough with a note resembling that of croup, and occasional dangerous laryngeal stenoses; paralytic symptoms, as aphonia, etc. Pulsatile movements of the manubrium sterni at the height of expiration when the hand is firmly pressed upon the sternum; also, notable smallness or absence of either carotid or radial pulse; these signs will in some cases rivet the diagnosis of aneurism and enable us to define its position more accurately.—*Med. Chir. Rundsch.*

A Case of Pneumotomy.

Dr. Theo. v. Openchowsky relates the following case: A patient, æt. 30 years, had an abscess of the lung following pneumonia, with the formation of a cavity in the right by the zone of suppuration breaking down. The fever continuing, rapidly exhausted his strength, and his recovery seemed impossible under purely therapeutic measures. The author deemed opening of the cavern the only resource, and accordingly proceeded to operate, with the patient under chloroform. About four inches each of the fifth and sixth ribs were exsected between the mamillary and posterior axillary lines, where tympanitic percussion and amphoric respiration had been most plainly audible.

Pleuritic adhesions were present, and a Paquelin cautery was sunk into the lung for the distance of about an inch, when pus, green and foul-smelling, flowed forth profusely. The walls of the cavity were curetted and the cavity washed out with a warm weak solution of permanganate of potash. In a few days the temperature fell to normal. The cavity was frequently washed out, and contracted rapidly, so that the patient left the hospital, a well man, two months after the operation. From this case Openchowsky draws the following conclusions:

1. Pneumotomy is well borne, and is in a few cases, such as the one related, the only measure of relief.
2. The operation should be performed early, as soon

as the presence of an abscess is certain, in order to save tissue and ensure a rapid obliteration of the cavity. This is opposed to the views of many, who look upon the operation as a last desperate resource. The author remarks that one can never tell which direction the pus will take, and that a long and trustful dependence upon nature's healing power is a useless sacrifice of the patient's power of resistance.

3. By an extensive resection of the ribs we ensure a thorough emptying and disinfection of the cavity, and assist its rapid contraction.

4. Disinfection of the cavity causes no unpleasant symptoms, even if long contined.

5. Previous pleuritic adhesions are a very important factor in the successful result of the operation; the cavity is more easily found and opened, and the possibility of a suppurative pleuritis is avoided.—*Zeitsch. f. klin. Med.—Cent. f. d. ges. Ther.*

BOOK REVIEWS.

Nervo-Vascular Charts. Examined and approved by John B. Deaver, M. D., Demonstrator of Anatomy, University of Pennsylvania. Philadelphia. 1889. F. A. Davis. Price, 50 cents.

These charts form another device for the assistance especially of the student in obtaining a clear idea of the sequence of division of the various nervous and vascular structures of the human body. They are arranged in three parts: I, The Nerves; II, The Arteries; III, The Veins.

Kilmer's Physician's Pocket Day Book, Journal and Ledger. Arranged by Dr. S. L. Kilmer, South Bend, Ind. Price $2.00.

This account book, though at first sight it appears to be somewhat complicated, is, after an inspection and examination, found to be so arranged that it fulfils the desirable indications for conciseness, yet comprehensiveness, one entry enabling the physician to embrace what, by other methods, requires entries for day-book, journal and ledger.

Space is provided for keeping accounts with corporations, with transient patients, for obstetrical memoranda, engagements; poisons and antidotes, fee-bill, and for old and unsettled accounts.

It is an admirably prepared account book.

American Armentarium Chirurgicum. Geo. Tieman & Co., New York.

This really elegant volume, quarto, of 846 pages, forms a most striking exponent of the liberal and progressive spirit that ever characterizes this great firm. We fail to see how they can afford to send out such an expensive work (as it evidently must be) for the insignificant price of one dollar a copy, unless it be done on the plan chosen by an Irish peddler, who could only afford to sell sandwiches at a cent a piece, for which he had to pay two cents, because he sold so many of them.

"In surgical works many of the instruments for performing operations are not illustrated. In illustrated catalogues, on the other hand, a description of the modus operandi is wanting. A good drawing of an instrument imparts an accurate conception of its form and construction. A description of the application added to this gives a clearer idea of its suitableness to the end proposed."

These facts have induced the publication of the volume in question in which is given not only a reliable illustration of each surgical instrument or appliance, but also a description of its workings and mode of application as derived from the writings of the inventor, or from late works on surgery and from other sources.

Various forms and modifications of the same instrument are also given, allowing the practitioner to choose for himself as to the one most suitable to his needs, as well as if he were selecting from the stock itself.

It is a veritable treatise on surgical instruments.

Essentials of Physiology, by H. A. Hare, B.Sc., M.D. (University of Pennsylvania), Demonstrator of Therapeutics and Instructor in Physical Diagnosis in the Medical Department of the University of Pennsylvania; Physician to St. Agnes' Hospital and the Dispensary for the Diseases of Children of the University Hospital. 12mo., pp. 193. Illustrated. Philadelphia. W. B. Saunders. 1889.

This little book, the first of a series to be issued under the general title of Saunders' Question Compends, arranged in the form of questions and answers, has now reached its second edition, which has been revised and enlarged.

It is well prepared to meet the wants of students of medicine who desire to have the essential features of physiology firmly fixed in their minds without having to re-read the whole of a large treatise on the subject. And it is well calculated to place the points in a new light toward him, such as is presented by his quiz master.

However carefully and comprehendingly he may have read in the original text, or listened to the lectures, many features appear vastly different when put in the form of questions, and hence this method of teaching is of the greatest service. And, too, as the author suggests, the student, in reading the standard works, is often at a loss to discover the important points to be remembered, and is equally puzzled when he attempts to formulate ideas as to the manner in which the question could be put in the examination room.

The physiology of the entire human body is embraced in this volume, and we commend it for the material practical assistance which it will give to the generally over-burdened student.

BOOKS AND PAMPHLETS RECEIVED.

The Treatment of the Fractures of the Neck of the Femur by Immediate Reduction and Permanent Fixation. By N. Senn, M. D., Ph. D., of Milwaukee, Wis. Attending Surgeon, Milwaukee Hospital; Professor Principles of Surgery and Surgical Pathology, Rush Medical College, Chicago, Ill.

Reprinted from the Journ. Am. Assn., Aug. 3, 1889.

Annual Announcement of Western Reserve University Cleveland, O. Session 1889-90.

Sixteenth Annual Report of the Metropolitan Throat Hospital, New York,

Reprints of Papers by Charles Warrington Earle, M. D., Chicago, Ill.:

Cirrhosis of the Pancreas, or Pancreatic Anæmia. Reprinted from the Transactions of the Thirty-fourth Annual Meeting of the Illinois State Medical Society, 1884.

The Treatment (Not Preventive) of Puerperal Fever. From Chicago Med. Jour. and Exam.

Presidential Address, Delivered at the Thirty-Ninth Annual Meeting of the Illinois State Medical Society, May 21, 1889.

Cephalæmatoma of the New-Born. From Jour. Am. Med Assn.

Antiseptic Obstetrics. From Transactions of the Thirty-Seventh Annual Meeting, Illinois State Medical Society.

The Influence of Sewerage and Water Pollution on the Prevalence and Severity of Diphtheria. From Archives of Pediatrics, Nov. 1888.

Retained Debris as one of the Causes of Puerperal Fever. The Intra-Uterine Douche and Curette.

Observations in Chiara's Clinic and the Hospital St. Maria Nuova, Florence, Italy. From Western Medical Reporter.

Observations in Vienna; The General Hospital, Billroth, Carl Braun, Bandl, and Others. From Western Medical Reporter.

Infant Feeding. From Journal of the American Medical Association.

Wood's Medical and Surgical Monographs, Vol. 3 No. 3, September, 1889, containing:

Congestive Neurasthenia or Nerve Depression, by E. G. Whittle, M. D.

The Art of Embalming, by Benjamin Ward Richardson, M. D.

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SOCIETY PROCEEDINGS.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Annual Meeting held at Evansville, Ind., Sept. 10 to 12, 1889.

Dr. G. Frank Lydston, of Chicago, Ill., read a paper entitled

Malignant Transformation of Syphiloma of the Tongue with Amputation of the Organ by the Galvano-Cautery.

The case presented in the paper is the only one of the kind on record, as far as the author was able to learn, being a transformation of a syphilitic into a sarcomatous process. Cases of transformation into epithelioma and "cancroid" are reported by Lang, Langenbeck, Weir and others, but this case is unique.

The patient, æt. 27 years, was a gambler who had syphilis of 10 years' standing, which ran a typical course. During this time tobacco and alcoholics were indulged in to excess. He had been salivated four or five times quite badly.

When the case came under Dr. Lydston's observation, four years before the finale, cerebral syphilis, tuberculo-squamous syphilides and tubercular lesions of the tongue were present. These were subdued, and with the exception of the condition of the tongue, the patient was pretty free from trouble for four years. During this time, however, the tubercular nodules upon the tongue ulcerated from time to time, but were checked by large does of potassium iodide, 300 grains daily being given at one time. The tongue finally began enlarging, and soon filled the mouth completely. Subsidence again occurred under the iodide. Several periods of improvement and relapse succeeded each other until finally the process proved absolutely resistant to treatment. The iodide was faithfully tried, the enormous dose of 900 grains per diem being taken at one time. The cervical lymphatics were meanwhile involved.

Sloughing finally began, but showed a tendency to limitation at the lingual raphe. It finally progressed, however, and as sepsis was evident, removal of the organ was proposed and consented to. The galvano-cautery was employed, the operation, on account of several

attacks of asphyxia necessitating vigorous and prolonged efforts at resuscitation, consuming about three hours. A preliminary tracheotomy was not performed. Recovery from the operation was speedy, the floor of the mouth healing very kindly. Recurrence occurred in the cervical glands and fauces in about a month, and the patient finally died of hæmorrhage from ulceration of the internal carotid.

The interesting features of the case are, in the author's opinion, as follows:

1. The absolute accuracy of the diagnosis of preceding syphilis.

2. The positive fact that an unequivocally syphilitic lesion finally merged into a malignant process.

3. The large doses of potassium iodide which the patient was able to take.

4. The necessity for complete destruction of obstinately recurring syphilitic lesions.

5. The value of the cautery loop in amputation of the tongue as compared with knife or ecraseur.

6 The undoubted causal relation of alcohol, tobacco and mercurial ptyalism to the final malignant transformation of the lingual process.

7. The inadvisability of doing such operations without a preliminary tracheotomy. The author most emphatically would not again operate without the preliminary operation.

8. The fact that the patient could articulate much more plainly with the entire tongue removed than with the diseased mass in the mouth. Although the floor of the mouth was left in the form of a saucer-shaped cavity, by the operation, articulation was tolerably distinct.

9. The value of inversion and suspension of the patient in the asphyxia of chloroform or ether.

10. The danger of asphyxia from the smoke emitted by the burning flesh in the absence of a preliminary tracheotomy.

Early Diagnosis of Chronic Kidney Lesions

was the subject of a paper by Dr. C. S. Bond of Richmond, Ind. This paper was really the report of a committee of one, appointed at St. Louis last year. In conclusion he gave the following summary:

Albumen in the urine probably always means disease somewhere in the body. In so-called physiological quantities, it may be referred to disease removed from the kidneys, and the cause as transient. In pathological quantities, it signifies either inflammation external to the kidneys or a lesion of these organs. Many patients with evident kidney lesions do not pass albumen. Albumen is constant and bears no relation to the extent of the lesion, but when present, must be respected as a prominent factor in diagnosis. It generally makes its appearance a long time after other well marked symptoms have existed and the disease is grave when it exists in pathological quantities and the symptoms therefore should not be awaited.

Casts bear an intimate relation to albumen but appear later. They are strong proof of renal inflammation, as they carry, usually, a part of its epithelium. Differentiation of the varieties of kidney lesions can often be made from this fact, but they, like albumen, are inconstant. Many patients do not pass them at all, and they always appear too late as a factor in early diagnosis.

The specific gravity of the urine is not to be relied upon, unless the mean specific gravity of many specimens is taken for known quantities of urine for twenty-four hours. This would mean a small amount of urea passed within the time, since it is the dominant salt eliminated; therefore why not test for urea at once?

Some outward manifestations of ill health, perhaps continued for years, always precede the passing of albumen and casts. These symptoms are in common with well marked kidney lesions and are not due to other discoverable physical causes. Cases, often without a change in these symptoms for years, begin passing albumen and casts. It is fair, therefore, to assume that the symptoms referred to are the result of some common cause which precedes the pronounced kidney lesion. This common cause seems to be something which produces extension and often inflammation of serous membranes, which at the same time or remotely, involves the kidneys. What this cause is, we can at present, only conjecture, but many of its pathological effects might be turned to advantage in early diagnosis. Urea is excreted in abnormally small quantities in cases of well marked kidney lesions. It is also exerted in cases having the prominent physical symptoms without albumen and casts. It is interchangeable as a means of diagnosis with the outward signs of the disease, i. e., a knowledge of ill health being also a knowledge of the amount of urea passed and vice versa. Urea is excreted in small quantities for months and often years before albumen and casts appear, therefore a knowledge of this excretion is invaluable as a diagnostic sign of early lesion. The diminished quantity of urea eliminated is the result of constitutional disturbances, which precede the local lesion for long intervals of time. Active treatment which would be harmful in other diseases having some symptoms in common, will identify this, generally relieves, and frequently apparently cures.

Treatment of the Insane in Relation to Science,

was the subject of a paper by Dr. Orpheus Evarts, Superintendent of the College Hill, Cincinnati, Sanitarium. This paper was very laudatory of the modern treatment. He did not believe insanity was a disease of civilization. It was a disordered brain. All who have brains are liable to this disease.

An Exhaustive trial as to the digestibility of the different Infants' Foods on the market has been concluded in the Children's ward of the Randall's Island Hospital, when Malted Milk seemed to take the first place.—*N. Y. Med. Jour.*, July 20.

SELECTIONS.

THE PATHOGENY OF NEURALGIA.

We know very little about the material alterations which attend neuralgia. We distinguish three phases in the operation of sensory nerves.

1. When the conduction is normal. Here the nerve conducts to the cerebrum impressions natural in quantity and quality; the resulting sensations are pleasurable or indifferent. Such normal conduction is a necessary condition of that correspondence between the organism and its environment which enables the former to adjust itself to changes outside of itself. A stimulus (heat, cold, a touch, some chemical or mechanical irritant, etc.) produces a certain effect of a chemical, molecular kind on the terminal filaments or trunk of a sensory nerve—this molecular change is propagated as a wave of motion to the cord and sensorium, where it produces the appropriate sensory-motor responses; there is a definite ratio between the stimulus and the effects engendered.

2. When the excitability is exaggerated. This state is called hyperæsthesia (excessive sensibility). The functional activity of the nerve is exaggerated from in tensity of the excitation. When this hyper-sensibility reaches a certain degree it becomes pain, but this lasts no longer, or but little longer, than the excitation which has given rise to it. Instances of this functional hyperæsthesia are seen in all inflammations and lesions attended with pain.

3. When the conduction is abnormal, and the resulting sensations are the consequence of a morbid irritability of the nerves and nerve centers. This form has been called by Jaccoud "spontaneous hyperæsthesia," and characterizes all the neuralgias. "A morbid hyperæsthesia raised to the potency of spontaneous pain constitutes neuralgia." The word spontaneous as here used does not imply the absence of every cause capable of accounting for the anomalous state of the nerve, it indicates simply that this anomalous state is not linked to the exercise of the function of sensibility, as in the case with a pain occurring in connection with the inflamma tion of a part.

It is difficult to find illustrations which can make plain the difference between these several modes of conductibility and the consequent states of consciousness.

If we place a number of marbles in a row, an impulse at the proximal end of the line will be transmitted to the distal end wlth a quality and intensity corresponding to the force communicated to the first marble of the series. We may suppose the melecules of a sensory nerve to be so arranged that an agitation at the peripheral end is similiarly transmitted. Impacts beyond a certain intensity might produce at the central end a shock which would so disturb the sensorial centers as to give rise to the phenomenon of pain; and yet there would be a definite correspondence between these central molecular disturbances and the amount of peripheral irritations. If we could imagine that each marble of that row was composed of something akin to dynamite; that there were irregular, fitful explosions all along the line from the most trifling cause, and that the quantity and intensity of the disturbance at the distal end would bear no proportion to the force which started the disturbance, we should have perhaps a faint notion of the condition of the pertubed sensory nerves in a case of neuralgia. There certainly is no objection to the hypothesis—which alone explains the facts—that the protoplasmic molecules of certain portions of the sensory apparatus in neuralgic patients are in a state of peculiarly unstable equilibrium, at the least provocation falling to a lower plane and liberating force which is propogated as a motor-wave to the central end; that such nerves are by this very instability and explosiveness ill-fitted for their ordinary function of conductors of sensory impressions while always predisposed to be the seats of violent attacks of spontaneous pain.

Writers have objected to the word hyperæsthesia as used in connection with the pain of neuralgia, and Vaulair has substituted the word, hyperalgesiæ. If the term be supposed to mean exalted function, it is manifestly inappropriate; if exalted irritability, it is perfectly proper. It does not require a wide familiarity with various kinds of pain to convince one that where there is pain there is increased excitability of a certain nerve or nerves; nor is it difficult, from personal experience, to recall instances where this hyperæsthesia, by the very fact of intensification, has run into pain, as in the sensory hyperæsthesia attending an ophthalmia. The pains from palpable organic causes imperceptibly shade into those properly regarded as neuralgic, and there is no absolute line of demarcation at the origin. All kinds of pain have for their direct antecedent excessive molecular transformation, and all are markedly influenced by anæsthetics, by quiet, absence or removal of stimuli; in fact, some pains of an undoubted neuralgic character get well as soon as all peripheral excitations are removed.

The causes of neuralgic hyperæsthesia may be arranged in three orders:

1. Intrinsic and primary modifications of the excitability of the nerve itself in some part of its tract, from its gray nucleus of origin to its terminal expansions.

2. Extrinsic lesions, which act directly or indirectly by relax action.

3. Constitutional states which modify the nervous excitability, generally by the intermediation of an alteration of the blood.

The first group contains the primary, or essential, neuralgias; the other two groups, the secondary, called sympathetic or symptomatic neuralgias.

An example of primary idiopathic neuralgia is seen in face-ache (prosopalgia) from cold. Examples of neuralgia due to extrinsic lesions acting directly, are seen in attacks of prosopalgia starting in dental caries, or a tumor involving a branch of the trigeminus; such lesions have been known to awaken neuralgic paroxysms indisguishable from those of idiopathic prospalgia. Illustra-

tions of neuralgia from reflex causes are seen in trigeminal, cervicobrachial, or intercostal neuralgias, originating in ovaritis, or some other affection of a remote organ.

Examples under the third head are seen in neuralgias due to lead poisoning, mercurial poisoning, syphilis or malaria. Jaccoud even classes neuralgias accompanying anæmia under this head, although more authorities would put them in the first division, *i. e.*, of primary or essential neuralgias.

Is it possible, from the knowledge which physiology gives us of the constitution of nerves, to come any nearer to an understanding of the phenomena which take place in neuralgia?

The conductability of nerves is a property inherent in the axis cylinder, which is the central core of the the nerve, and is composed of protoplasm. The ultimate peripheral termination of sensory nerves is the naked axis cylinder. On these potoplasmic filaments, which in many parts of the body terminate in sundry appliances (Paccinian corpuscles) which are "multipliers of disturbance," and have the function of concentrating on the nerve ends the action of external agents, cause a multitude of impressions from the outer world, from the tissues in which these nerves ramify, and from the circulating blood. What is the kind of change which is produced when an impression, as of contact, of heat, or of cold, is made on these sensory filaments? The only tenable supposition is, that a wave of molecular disturbance—akin to the modification that takes place in a telegraph wire when a message is sent—is instantly propogated the whole length of the nerve to its central nuclei. In the normal state a nerve apparatus which is the seat of such changes, not imaptly called "isomeric transformations," speedily reintegrates itself from the circulating blood, and the disturbance does not exceed the healthy mean; there is no pain. How is it when, from natural or acquired instability of the nerves, there is too much molecular transformation?

Herbert Spencer remarks that "the (peripheral) afferent nerves of individuals who, though otherwise healthy, have lax tissue, are often unduly impressible." Other causes besides "lax tissues" may produce this excess of impressibility. It may accompany vaso motor weakness and congestion, for local excess of blood is attended with local exaltation of sensibility. We have to note also the seemingly anomalous fact that local deficiency of blood, as in anæmia, renders the nerves abnormally impressible. Ordinary excitants are capable of producing an extraordinary amount of molecular change. Cold, which is one of the normal excitants, may, by its prolongation or intensity, bring about that excessive transformation which finds expression in a neuralgic paroxysm. A mental shock, a physical injury, even a decayed tooth, may start a disturbance in certain nerve branches which, not being repressed by the higher nervous energies, co-ordination being weakened or broken, soon amounts to a riot in the organism; the central sensory centres are fatigued, overcome, charged with the products of disintegration, and brought to that state of molecular disorder which constitutes algesia, and whose conscious expression is pain.

But it will not do to lose sight of the fact that neuralgia may begin centrally as well as peripherally, in a lowered state of neutrition, and in resulting dynamic pertubation of the central gray nucleus itself. This is, however, not the ordinary mode of onset of neuralgia.

The above conception—instability of the ultimate nerve elements, broken co-ordination, brings neuralgia into harmony with the other neuroses, epilepsy, hysteria, chorea, etc.

The intermittency of pain is a consequence of the intermittent character of the nerve action. "If," says Herbert Spencer, "a nervous disturbance travels as a wave of molecular change; if this wave is such that the molecules of nerve substance fall from one of their isomeric states to the other; then having fallen, in passing on and increasing the shock, they remain capable of doing anything more until they have resumed their previous isomeric state."

But how may we account for the peculiar character of neuralgic pains? The pain of a neuralgic paraxysm is something different from the pain of an abscess in an otherwise healthy individual, or the pain of a pleurisy. The pain of neuralgia may be decomposed into a permanent pain, and, at certain moments, aggravations of this pain of the nature of spontaneous recrudences. Moreover, the neuralgic suffering is attened with painful irradiations into neighboring nerves of the same branch and soon into other nerve trunks and their branches.

The explanation must be sought in the constitutional state of the subject whose neuro-mechanism is in the peculiar condition of instability before alluded to—responding to irritants in a fitful, disorderly and excessive manner, then, for a brief time becoming exhausted till sufficient material has been assimilated for another series of discharges. The phenomena of diffusion and irradiation is accounted for by the intensity and quantity of the molecular motion liberated—waves from one set of nerves being reflected on other sets of nerves. According to this view, the phenomenon is one of peripheral transfer—of simple overflow. Erb, however, has another explanation. In these cases of irradiation, we have to do with a transfer of the excitation from the central cells to other cells, also central, but corresponding to other nerve branches, and the sensation is referred to the periphery of the latter in virtue of the law of eccentricity. But it would seem that this explanation, as well as that before given of peripherial transfer, not so applicable to painful irridiations as to simple diffusion of pain. Perhaps the explanation given by Vuulair may be deemed the most satisfactory. Every nerve of sensation exchanges recurrent filaments with the neighboring branches. In an algesic condition, the recurrent filaments may be spared, if the excitation does not exceed a certain degree of intensity. If, however, the excitation becomes too vehement the cells of the recurrent system of nerves will take on in their turn the

algesic state to become quiet again when the hyper-excitation shall have ceased.

A similar use is made of these recurrent filaments in explaining the points douloureux. These filaments lose themselves suddenly in tissues surrounding the nerves in the vicinity of the foramen of emergence; subcutaneous tissue, periosteum, neurilemma. If the recurrent filaments become the seat of a neuralgic process, the least pressure exercised on the tissues in question, or even the normal tension of the parenchymata or of the blood will always affect in an algesic sense a part of the fibres which form this sort of terminal tuft. The impression will be transmitted to the central cells, and these, by virtue of the law of eccentricity, will refer the painful sensation to the periphery, to the very point irritated.—Ed. *Med. Age.*

FLAP-SPLITTING OPERATION FOR LACERATION OF THE PERINEUM.

Among the various procedures which have been devised for the repair of lacerations of the perineum, the flap splitting method occupies a prominent place. This method has been employed and commend by such prominent operators as Simpson, Hart, Tait, Sanger, Martin, Zweifel, Parvin and Munde. The originator of the operation appears to be unknown, it being credited to several men. As would be expected, almost every operator uses a slightly different technique, making such changes as are demanded by the individual case or as suit the fancy.

It should not be forgotten that the method is recommended both for so-called incomplete, and for complete tears of the perineum. Upon theoretical grounds the method seems admirably adapted to the cure of complete lacerations. As is well recognized in complete lacerations, the injury almost always consists in a median tear. This involves the entire depth of the perineal body—from the posterior commissure of the vulva, into the rectum—and extends for a variable distance up the recto-vaginal septum. Hence, the levator ani muscle is slightly, if at all, involved in the injury. The shallow incisions which are made, are deep enough to lay bare the retracted ends of the muscles—usually the bulbo-cavernosus, transversus perinei, and sphincter ani—so that when the suturing is complete these divided ends are brought more or less closely together, and the parts are restored approximately to the normal condition. Union of the sundered ends of the muscles is doubtless more often mediate than immediate; but the muscle upon each side is attached to the intervening scar tissue, and in this way its function is restored. Thus the operation rests upon a sound anatomical basis; and from the practical stand point, it is to be commended because it can be performed with comparative ease and rapidity, and most of all because the results obtained are very satisfactory. The method also has the advantage of sacrificing no tissue, so that in case union is not obtained, the woman is little if any worse off than before the operation. Success has been obtained by this method after failure by the more customary plans; and undoubtedly it offers great advantages in cases in which much tissue has been lost, whether by sloughing, or by means of the surgeon's scissors.

It seems, however, that the flap-splitting operation is not so well adapted to the repair of so-called incomplete lacerations. It is now generally admitted that the injuries which are classed under the general title of incomplete lacerations of the perineum vary greatly in extent, in the anatomical structures involved, and hence in their effects. We find classed under the same head median lacerations, involving only the skin and perhaps the superficial muscles and connecting tissues, with deeper lacerations, which extend up one or both sulci and involve more or less of the levator ani muscle. Yet all practical men recognize that these injuries are essentially dissimilar. The one is a comparatively trivial accident, causing perhaps subinvolution and an open vaginal entrance. The other destroys the supporting action of the pelvic floor, and often entails retroversion and prolapse of the uterus, cystocele and rectocele, upon the unfortunate woman who has suffered from it. For the repair of median lacerations of slight degree—that is for lessening the size of the introitus—the superficial incisions, recommended for the flap operation, are probably sufficient; for usually the operation can be classed as cosmetic, or at most it aims to bring together the superficial muscles. But anatomical considerations should prevent the most sanguine operator from expecting to repair lacerated muscles and other structures situated within the pelvis, by a superficial operation made upon the skin surface of the perineum. How can an incision one-fourth of an inch in depth, made from the skin surface, lay bare the ruptured lavator ani, or sutures then introduced bring together its severed parts and restore its function?

In the *American Journal of Obstetrics*, July, 1889, in a plainly written and well-illustrated article, Mundé gives the technique of the flap-splitting operation, and also his experience with it. He commends it most highly for the cure of lacerations extending into the bowel, and also for what he calls uncomplicated incomplete lacerations, but considers it inapplicable when rectocele is present. It seems important to bear this distinction in mind, that is if anatomical considerations are to have weight in perineal surgery. An objection to the flap-spliting operation in some cases is that the scar tissue is not removed. This scar tissue at times causes neuralgia, and in such cases it should be excised. The status of the flap splitting method applied to incomplete lacerations is unsettled, but at the present time its field of usefulness appears to be limited to superficial injuries. —Ed. *Med. and Surg. Rep.*

PHISICIAN.—"You see your son is feverish, madam. Notice the coating on his tongue."

Mrs. Anxious: "I don't see any coating on his tongue; but I see an ulster in his throat and his pants are dreadful short."—*Archives of Pediatrics.*

ORIGINAL ARTICLES.

SIMPLE ANÆMIA.

BY H. W. LOEB, A. M., M. D.

Professor of Physiology and Hygiene, Ensworth Medical College; Resident Physician Ensworth Hospital, St. Joseph, Mo.

Read before the District Medical Society of Northwest Missouri, July 11, 1889.

The average man, whose seeming occult mind is more often filled with the marvelous than with the true nature of things, feels his thirst for the mystic waters of medical love well satiated when he speaks of blood diseases. Taught to believe in the strict letter of the Bible "The blood is life," he readily and willingly ascribes to this flowing tissue any disease that shows its unwelcome head in the human system. Poor ruby liquid, flowing so noiselessly, yet full of purpose, through the veins of man, you must bear the brunt of many words of blame!

There are some physicians too, who still cling to this idea of the omnipresent cause of all disease as existant in the blood; there are some in whom the blood disorders, the blood tonics and the blood purifiers fill to the brim the cup which contains the salvation of their patients. Pathology, however, with its manifold proofs, has given new thoughts and new feelings upon this topic.

In the light of the present era of progressive pathology there are few truly blood diseases, with lesions primarily existant in the blood.

Simple anæmia, however, is a disease of the blood; the lesions, easily determinable, are in the blood and of the blood; the diagnosis is to be made by recourse to the blood as an independent tissue; the treatmnnt is essentially applied to the blood. Of this disease, sometimes termed chlorosis, authors have very little to say; possibly because until the last few years little has been known of its pathology; more probably because it was deemed too insignificant or erratic to be classified. But simple anæmia is by no means an unimportant disease; although, as I hope to make clear, the diagnosis, symptoms and treatment are fairly constant and scientifically easy to determine, the affection is so widespread in its victims that it becomes a matter of every day life of a physician.

A deprivation of blood may exist under many circumstances of morbid change in the functions and functionating elements of the human frame; these are not necessarily cases of simple anæmia. Anæmia may occur as a symptom accompanying fevers, phthisis, Bright's or any wasting condition, but this is the symptom anæmia and not the disease, simple anæmia.

Chlorosis, or the simple anæmia, of which I speak, is a disease *per se* and the term should be applied to a special class of affections, the cause of which, it grieves me to say, we know not. The frequent association of constipation with simple anæmia has led many to consider this its etiological factor. Experience, however, does not bear this out; for not a few cases exist without this symptom, constipation. Again, some hold that the marked changes which occur at puberty so affect the blood of females that chlorosis supervenes as a consequence of that physiological or perhaps morbific circumstance. It is by no means a constant occurrence at this age, nor does even a considerable portion of women suffer from this complaint; laying the cause to puberty would necessitate further explanations for its absence in so many, explanations which could not be given. Further than this, to say that it was the result of puberty would be applying no specificity to its cause and thus a final cause would still be unknown. These have doubtless some bearing upon the disease and its causation and the same may be said of other incidental aids, such as over-work, over study, early menstruation, too little work, the demands of modern society.

Women seem to be the sufferers from simple anæmia to the exclusion of men, still cases have been reported of the disease in man. Between 14 and 24, women are more or less susceptible to the disease, especially, as has been intimated, those who live in cities, servant girls, students and society ladies. When we speak of the

Pathology

of simple anæmia we pass at once from a field of speculation and doubt into one of certainty and satisfaction. The pathology is known and should be known by all who profess medicine as their work.

Most marked are the changes in the blood. Pale, more fluid in consistency, the red blood cells are naturally diminished in number, often being as low as 2,500,000 per cubic millimeter ($^1/_{25}$ cu. in.) instead of 5,000,000, as the number is in health.

The percentage of hæmoglobine is almost invariably diminished; I call to mind many cases in which it was from 25 to 20 per cent of the normal quantity. The white cells, too, as a rule, decrease in number, although not at all proportionate to the red. The blood plasma in some cases diminished, in many cases markedly augmented, forming a virtual hydræmia. The serum, albumin and some of the other constituents of the blood are ordinarily reduced in quantity.

Much has been written and said regarding the congenital smallness of the aorta and other arteries as a pathological and etiological feature of the disease. Very nicely would it explain the anæmic murmur, so similar to the murmur of aortic or pulmonary stenosis; but, unfortunately, it will not stand the test of discussion, for why should this disease so readily yield to iron if it were due to this congenital condition? Why do the bad effects not show themselves at other times than at the period of adolescence? The unanswered questions are sufficient to turn the supposition into naught. The changes in the organs of the body are, if anything, very slight and are dependent upon the

changes in the blood; at any rate they are unimportant and almost irrelevant.

THE SYMPTOMS

of simple anæmia are very constant and well known. The subjective signs will appear to the physician with a regularity that is astonishing. Malaise, indisposition to undertake any sort of work, constipation, occasionally attended by its co-evils, hemorrhoids and gastric derangements. Headache and vertigo are not unfrequent, and the so-called muscular pains in the limbs are fairly constant. Anorexia or capricious appetite is the rule; slate pencils, chalk, earth and the most indigestible things are preferred to the most delicate condiment. Amenorrhœa occurs in many cases; indeed, it is frequently the first symptom that intimates to the patient and friends the presence of a disease. I have seen dysmenorrhœa instead of amenorrhœa in not a few cases. Shortness of breath, superinduced by the greater pulmonary activity due to the need of an increased amount of oxygen to overcome the effect of the limited number of red cells, is a most distressing symptom; palpitation, too, we find in almost every case.

When we come to the objective signs and symptoms, we tread upon ground that has been well surveyed. The patient's general appearance is characteristic; a delicate, unearthly paleness, at times so marked that the eyes and eyebrows seem like charcoal marks upon a marble bust; lips pale, conjunctivæ likewise pale, and the tongue flabby and of a salmon tint. The patient is seldom poor in flesh; her figure is more apt to be well rounded and full. She seems eternally tired and is visibly slow in what she does.

A loud systolic murmur is generally heard in the second left intercostal space. Ordinarily the region in which this murmur is distinguishable is rather limited, but I have observed it all over the præcordial region, even resembling the loud rasping murmur of mitral regurgitation.

Not much reliance is to be placed upon the so-called hæmic murmur of the jugular vein, of recent fame. It is heard in many who have had no chlorosis; in fact it is quite likely that it may be heard in nearly every one we take the trouble to examine, if only we place the neck in proper position and bestow a sufficient amount of imagination upon the jugular in question.

By means of the hæmatocytometer the number of the blood cells to the cubic millimeter ($^1/_{25}$ cu. in.) is easily determinable. I have used this instrument in a great number of cases of simple anæmia and have yet to see the first one in which there was not a diminution of red blood cells. The principle of the instrument is simple enough; dilute a drop of blood with 99 parts of a salt solution; place a drop upon a carefully prepared slide; cover with a special cover-glass which leaves a space $^1/_{10}$ of a millimeter high; looking through the microscope minute hair-lines will be observed dividing the field into square $^1/_{20}$x$^1/_{20}$ millimeter, then counting the number of corpuscles in a square and multiplying such a number by 20x20x10x100 or 400,000, the number per cubic millimeter is found. A hundred such squares should be counted and the average taken to insure sufficient accuracy. The corpuscles in chlorotic subjects vary from 2,500,000 to 4,000,000.

With the hæmoglobinometer, the percentage of hæmoglobin in relation to the normal quantity is ascertained. The diluted blood is compared in color to a glass that has been tinted with some salt of gold. The percentage sometimes reaches as low as 20.

THE DIAGNOSIS

is simple enough, being determinable by the color of the skin, lips and conjunctiva; by the anæmic murmur; by the general incapacity for work; and by recourse to the hæmoglobinometer and hæmatocytometer.

THE PROGNOSIS

depends upon the doctor. So far as I am concerned I have never seen a case that improved or recovered without proper medication. Again, I have never seen a case that did not come to a happy termination.

TREATMENT.

If it were asked of me what were the three best agents to use in simple anæmia, I should unhesitatingly respond "iron, iron, iron;" if urged to name another agent, I should call for more iron. Iron acts as a positive specific in chlorosis, at least as truly specific as anything can be in these days of rule exceptions. In administering it, however, it must be pushed to its physiological effect; nothing short of this can accomplish any good. A good prescription, though an old one, is the following:

℞ Ferri carbonatis, - - - gr. ijss
Potassii sulphatis, - - gr. ijss
M. Ft. cap. No. 1.
Sig. One, two, three, four, five or six t. i. d., as the case demands.

With a prescription of this nature, one may obtain the physiological effect of iron without materially deranging the stomach, an important point. It has been my practice to begin with one of these and to increase the dose rapidly. The patient improves at once; the appetite returns, the color of mucous membranes heightens, the palpitation and dyspnœa and, coincidently, the murmur disappear; the hæmatocytometer shows each week an increase of blood cells; the hæmoglobinometer indicates a gradual increment of hæmoglobin; the patient recovers. The iron must not be discontinued for some weeks afterwards, as a relapse is not uncommon.

Other agents, such as arsenic, corrosive sublimate and tonics have been used, but they act mainly as adjuvants, not specifics. In few of the cases which have come under my observation, the inhalation of oxygen was productive of good results.

How the iron acts it is difficult to say. It must have some special influence upon the formation of hæmaglobine, of which it is such an essential chemical constituent.

Though the clinical history is reasonably constant in so many cases, there are those who present peculiari-

ties, both unexpected and interesting. I recall a case in particular, peculiar by reason of its anæmic murmur.

Julia D——, a handsome octoroon, æt. 23 years, presented herself for treatment at Roosevelt Hospital in the service of Dr. W. B. James, whom I was then assisting. She had the classical symptoms of simple anæmia. For a year previous she had been very pale, but did not think she was sick beyond the circumstance of amenorrhœa which she had. Hæmatocytometer indicated 2,500,000 red blood cells; hæmoglobinometer 25% hæmaglobin. Physical examination of lungs, negative. Examining the heart we were not a little surprised to find the following well marked murmurs: A loud murmur of mitral quality, systolic, heard at the apex and transmitted to the left axilla; a præsystolic, heard over the nipple, of that rumbling quality found in stenotic murmurs of the mitral; a loud systolic, similar to the one heard at the base on the right, left and over the sternum. The murmur was heard loudest over the third intercostal space, an inch to the left of the sternum. Here was a brilliant opportunity for the diagnosis of triple valvular lesion. Suspecting that much of the murmurs was due to simple anæmia, as the pulse did not indicate a grave cardiac disease, iron was administered in large doses after the manner which I have described. The patient improved at once, the murmurs lessened, the one in the mitral area disappeared first. Six weeks after the treatment began, only the ordinary anæmic murmur in the second intercostal space remained. Six weeks later this too disappeared, and the patient was well. I present this case to show how necessary it is to remember that chlorosis produces a heart murmur.

RESUME.

1. Simple anæmia is, demonstrably, a blood disease, with lesions situate in the blood.
2. The etiology is still in doubt.
3. The symptoms are fairly constant.
4. The diagnosis is easy and certain.
5. Iron is above all others an indication for treatment.

If I have turned the current of your thoughts for a moment upon this important disease I am content, for from the smallest acorns grow the mightiest oaks.

Ensworth Hospital.

A CONVENIENT AND COMFORTABLE DRESSING FOR FRACTURE OF THE BONES OF THE HAND.

BY GEORGE F. BEASLEY, M. D., LAFAYETTE, IND.

Read before the Mississippi Valley Medical Association, September 12, 1889.

Injuries of the hand occurring so often among the wage earner, demand from us that we use our utmost skill in the treatment, so that they may recover with the least deformity, and, at the same time, the appliances should be the most simple and comfortable.

These injuries usually result from direct violence, which producing such injuries of the soft parts that the dressing should be of that character that will permit bathing, or application without destroying their efficacy.

But little of practical benefit can be gleaned from the authorities on surgery, most of them passing these injuries with a few remarks as though the matter were trivial, instead of demanding the most careful attention.

But some of the principles laid down in the treatment of practice in other parts of the body can be applied here. It is a well-known fact, that the best results in the treatment of fractures are often obtained when the injured limb is placed in the position it naturally assumes when at rest; hence, one of the most comfortable, as well as convenient dressings of the fractured humerus is the Stromyer pillow, filling as it does the augle between the chest and the arm.

In fractures of the forearm, placing and retaining it midway between pronation and supination. Fractures of lower extremities, either in the flexed or extended position.

The hand at rest and flexed; the palmar surface concave in all directions, or inclosing a complete sphere. Acting on this hint, I have been using for some time, in fractures of the hand, for a palmar splint, an ordinary rubber ball,such as are sold to children with which to smash the family mirror and bric-a-brac.

Plug the opening, and if the ball does not completely and snugly fit the flexed hand, cover it with absorbent cotton jute, or what is better, marine lint.

Then, after putting the fractured bones in proper position, place the ball in the palm and flex the finger and thumb around it, then using a roller about one and and one-half to two inches wide, snugly bind them in place. At first I used a dorsal splint of gutta-percha, or cardboard, but found this was superfluous and often annoying, it being the only part of the dressing of which the patient complained.

The advantages of this dressing over the straight splint are: It is more comfortable and more easily borne. Is not inconvenient and in the way, as when a finger is extended and rigid, catching on every obstacle and rendering life a burben to the sufferer.

In case there is partial anchylosis, it is much easier to restore the function of a flexed, than an extended finger and if there should occur complete anchylosis, the flexed condition is not so much of a hindrance in labor.

In some cases there is more or less comminution or over-lapping. In these the bow, if any occurs, will be on the dorsal, instead of the palmar surface and will not impair the flexing of the finger.

If only the ulnar side is injured the dressing can be so applied as to leave the thumb and index finger free, and if it is the right hand, the sufferer can use the hand in writing, eating, etc.

REPORT ON PROGRESS.

DISEASES OF CHILDREN.

Methods of Treating Diphtheria.

I. A French Method.—Dr. E. Gaucher, in the *International Journal of Surgery*, gives in detail "A New Treatment of Diphtheria."

He argues that, as this disease is an infectious one, having a local origin, the treatment of the local manifestation is of prime, if not of sole, importance.

Generally, but not always the throat is first affected. "A poison is elaborated by the diphtheritic microbe in the interstices of the false membrane. This poison, which is soluble, is absorbed into the circulation and causes the constitutional symptoms."

What then is to be done? The removal of the source of infection by thoroughly removing the false membrane and at the same time rendering the parts aseptic.

This he accomplishes with concentrated phenic acid. Phenic (carbolic) acid in concentrated solution in alcohol, or in combination with camphor—phenicated camphor—is the form he prefers.

The proportions are, five to ten grammes of concentrated phenic acid and from twenty to thirty grammes of camphor to ten grammes of alcohol, at 100°F. Add to this solution an equal volume of sweet oil.

The camphor is not essential. A swab made by wrapping absorbent cotton around a small stick makes a good applicator, for with this the membranes may be burned loose and then removed.

This operation should be done twice daily.

In the interval, irrigate the throat every two hours with a 1% carbolic acid solution by means of an ordinary fountain syringe.

The author recognizes and enumerates the objections raised by others to the heroic treatment for diphtheria, but holds the end justifies the means.

He says that it is a very painful procedure, so painful in some cases that it requires very great courage to continue the treatment. That there is inflammatory reaction and cousequent difficulty in deglutition; that there are often symptoms of carbolic acid poisoning though never serious. This last complication he thinks may be fortunate for the general infection is combated. Since 1879 he has treated sixteen cases of diphtheritic angina of grave form. Some were desperate cases, to which he was called as a last resort. All of them recovered. He quotes a report of Dr. Dubonsquet-Laborderie in the *Bulletin de Memoires de la Societe de Medecine Pratique*, where he treated eighty-four grave and malignant cases by his (Dr. Gaucher's) method. Of these eighty-four cases, eighty recovered, viz., 92% recoveries of the grave form of diphtheria.

The point the author lays particular stress on, is the complete radical charring and removing at each sitting of every particle of false membrane, and then touching up the denuded surfaces.

II. A German Method.—Renvers (*Therap. Monatsh* 1889, 145) believes that diphtheria is a disease with local, followed by general, infection, but that all antiseptic applications for staying its advance are valueless.

General medication he thinks is of but little value, so he adopts artificial feeding as the only rational treatment to combat the terrible malady.

He, however, treats the local affection by washing out the throat not oftener than every two or three hours, by using ice internally and externally, and by inhalations. In the general treatment he does not use specifics and antipyretics and does not disturb or annoy the patient oftener than is absolutely necessary. He finds morphia in small doses beneficial. Strong wine he gives freely, as well as other stimulants, but the nourishment of the patient is of most importance. This is, when necessary, accomplished with the aid of the stomach tube, and he considers it necessary, if insufficient nourishment be taken, on account of paralysis of the organ of deglutition, or from any other cause. He has no trouble feeding small children in this way. He reports excellent results.

III. An American Method.—Dr. J. C. Mulhall, of this city, read a paper on "Local Treatment of Diphtheria," before the American Laryngological Association at its last congress.

A brief mention was made in a recent number of the Weekly Medical Review, of the original part of the treatment he advocates and has practiced for four years, the pharyngeal irrigation.

Though the irrigation is practiced hourly, a half pint of some antiseptic solution being used each time, the post nasal region is not cleansed by this method. The author condemns the carelessness and ignorance exhibited by some physicians who permit this very susceptible region to go untreated. For this purpose he uses his own modification of the ordinary two-drachm glass syringe. This modification consists in a bulbous enlargement which not only prevents its being introduced too far, but also lessens the force of the stream.

Two drachms are injected into each nostril. An antiseptic powder of iodoform, sulphur or salicylic acid and cocaine is insufflated. The quantity ordinarily used is sufficient to keep up a constant antiseptic application by its slow dissolution and trickling over the adjacent parts. Vapors are used in conjunction with the local treatment.

The nourishment of the patient must not be lost sight of. The vaporizing is done in the following manner, which is a modification of Delthil's plan.

After baring and fumigating a small room, a sheet saturated with disinfectants is hung across the door-way. A gas-stove is used supporting two half gallon vessels containing water. Into each, half a pint of pine tar and a tablespoonful of oil of turpentine are stirred. The quantity of water is kept up and the turpentine is replenished every half hour. At appropriate stages the inhalation of the fumes of slacking lime should be used.

Night Terrors in Children.

Dr. Ullmane, in the *Albany Medical Annals*, reports two cases of this malady in young children. The symptoms were similar and pathognomonic in both cases, for they both woke from sleep (after retiring in perfect health) beside themselves with fear. Some common object in the room, such as a globe, was a horrible animal about to devour them. These attacks occurred in one case three nights in succession, in the other, irregularly for several nights. The cause, as a rule, is an over-loaded stomach on going to bed. Ghost stories and frights may excite such attacks in weakly children.

Dr. Pepper is quoted as saying—"In children it evidently needs but a vivid impression upon the mind in the waking state to produce in the following night, and sometimes for many nights afterwards, the dream which is to cause all the phenomena of the severest night terror. The child may be in perfect health and yet the mind in sleep so acts as to reproduce in full or exaggerated force the terrors which have been felt in the waking state, and perhaps while the child was in full happy play. Children predisposed to this condition by some unusual activity of the brain, have the attacks whenever their health is deranged in any way, as by indigestion or by febrile disturbances from any cause."

For the relief of night terrors, *pavor nocturnus*, the cause which has brought them about should be removed.

This may be found to be gastric, intestinal, urinary, dental or nervous.

Dietetic treatment is generally sufficient. When the ætiology is nervousness, bromides of ammonium, sodium and potassium,valerianate of ammonia or the tincture of valerian may be tried. While the paroxysm is driving the little sufferer apparently into spasms it is best to attempt to soothe by gentle means, not by harshness, for this only makes him worse.

"The charming advice of good nature coupled with time always meets my expectations admirably."

Case of Nutmeg Poisoning.

A peculiar case is reported by Dr. Amos Sawyer in the *New York Med. Journal* of September 28. The author was called to see a boy æt. 3 years, whom he found unconscious and presenting the following symptoms: Complete relaxation of muscles; pupils dilated; temperature and respiration normal; pulse a little slow, but otherwise normal.

It was learned that he had chewed up "for tobacco" five nutmegs presumably not swallowing the solid part.

About two hours later he complained of dizziness and soon went off into the condition described above.

He remained in this condition 30 hours, during which time his bowels moved once and he passed water twice.

e recovered consciousness as if awaking from natural s umber. There was no delirium.

Fat in the Fæces of Dyspeptic Children.

Dr. W. T. Tschernow, of Moscow, published in the St. Petersburg, *Medicinische Wochenschrift*, his analysis of the fæces of dyspeptic infants, which he found to differ both physically and chemically from the fæces of healthy infants. Dyspeptic fæces contain 85 per cent. solids and nitrogenous, fatty and in organic salts.

The solids of normal fæces consist of from 25 to 30 per cent. fat, 30 to 32 per cent. of albuminous matter, 10 per cent. of salts, and 28 per cent. of carbo-hydrates; while the solids of dyspeptic fæces contain 45 to 60 per cent. of fat, 14 to 25 per cent. of albuminous matter.

The carbo-hydrates do not differ very much. In dyspeptic fæces fat increases at the expense of albuminous matters. This proportion was observed alike in children at the breast and in those fed on artificial food. All dyspeptic fæces contain as above mentioned, more fat than normal fæces, and the quantity of fat does not dedepend on the degree of indigestion. Dr. Tschernow concludes from these results that Demme's and Biedert's "fatty diarrhœa" was simple dyspepsia.—*Lancet.*

Fulminating Pyo-hæmothorax in an Infant æt. Eight Months.

Dr. Angel Mooney reports a case with this title in the *Lancet* of August 31, last. The author says: "The rarity of this affection in infants under the age of 12 months, and the difficulty of distinguishing it at the outset from simple intense bronchi, pneumonia, constitute the *raison d'etre* for the publication of the case.

An additional reason for so doing is, in our opining, that a necropsy was made,thus confirming the antemortem diagnosis, a thing which is not done so often as it should be, generally because the family will not consent to it. For the author's and this additional reason this case in full is given here:

The patient was a female child, æt. 4 months when first seen, September 14, 1888. The interest in the case does not really begin till the morning of January 20, 1889, when I was called to see the child because of the state of her breathing. She had suffered from a catarrh during the past four or five days, but on the night of January 19, she was in a state of sound sleep, with a normal temperature, and breathing 24 to the minute; this proved to be a calm before the storm. January 20, at 9 o'clock, the breathing varied from 56 to 72 per minute, and the expiratory sound was panting, with a well-marked pause between inspiration and expiration (so-called expiratory respiration). The temperature was 104.2°; the lips pale and slightly blue; the alæ nasi working, but not the sterno-mastoids; the pulse was 168. The child screamed at the slightest touch, and especially when lifted up in such a way as to stretch the trunk; the right back and side were harder than the left; there were dulness, tubular breathing, and sharp rale at the right base behind. This side was ordered to be poulticed and an ice-bag applied to the head. The abdomen

was normal. There was no retraction of the head, but the child had vomited once. January 21, there was no improvement, the dulness at the right lower half of the chest had increased, and there was some sensation of resistance on percussion; the heart's apex beat was in the fifth space, a quarter of an inch within the nipple line; the left sterno-mastoid was working very vigorously; the right side did not move so freely as the left; the supra-sternal notch and lower sides of the chest receded during inspiration; the abdomen apparently moved equally on the two sides; certainly there was no want of expansion during inspiration over the lower abdominal region. The case progressed from bad to worse, and on Wednesday night (23d) matters seemed to be rapidly coming to an unfavorable climax; the whole of the right side was dull, and there were dulness and crepitation over the left lower lobe. Thursday morning an exploring syringe was introduced in the right lower axilla and a sanguinolent fluid withdrawn; twelve ounces were at once evacuated by aspiration; after this the child, and the breathing, and the pulse were much improved, but toward the afternoon grew worse again, and it was evident from physical examination that air had gained access to the pleura, and that the lung had not expanded. Mr. Bilton Pollard then used the aspirator with marked temporary relief, and with the further withdrawal of a few ounces of the same sanguinolent fluid. But the relief was only temporary, and the next day it was decided to lay open the thorax and relieve the pressure caused by the pneumothorax on the lung and mediastinum. This was done with great benefit; the child recovered consciousness to a considerable extent, and the pulse and breathing were greatly improved. Saturday (the 26th) vomiting and diarrhœa became more frequent, the brain again began to fail, the anterior fontanelle sank, and the child died at 3 P.M., in a state which Marshall Hall would have called "hydro cephaloid."

The necropsy was most instructive. The disease was limited entirely to the thorax, and there were no tuberculous formations either in the lungs or mediastinal glands; the pericardium and left pleura were healthy; the lower lobe of the lung was consolidated—collapse-pneumonia over its lower half; the right lung was much reduced in size, and occupied the groove by the side of the vertebræ; its substance was hard and collapsed in the upper half, but friable and evidently pneumonic in the lower half. On section, muco pus was seen in the tubes, and several small collections of pus were seen in the periphery of the consolidated lower lobe; one of these was in direct communication with the pleura by means of a widely patent fistula. The whole of the pleura was lined with a greyish-yellow lymph, and the subcutaneous and muscular tissues of the thoracic wall were infiltrated with a sanguinolent serum.

The history of the case was most probably this: After a catarrh severe broncho-pneumonia set in, and in places proceeded to the formation of small abscesses; one of these burst into the pleura, and set up pyo-hæmothorax of fulminating intensity. Relief naturally followed the removal of the positive intra-thorax pressure, but the bronchial fistula in the lung allowed of the development of a pneumo thorax of such severity as to jeopardise life by its intra-thoracic pressure on the mediastinal contents.

Copaiba as a Dressing for Wounds.—The literary physician, in searching the writings of practitioners of by-gone ages, not only obtains a pleasant diversion of the thoughts, but also finds suggestions which may be of great value to him in his practice. Many valuable discoveries of ancient times lie covered with the dust of neglect and prejudice, ready to reveal themselves to him who, not satisfied with the changing fashions of the day, seeks among the records of past experience the trusty agents with which the great fathers of medicine met and conquered disease.

In the *Bost. Med. and Surg. Jour.*, August 8, 1889, Dr. Beach, of the Massachusetts General Hospital, tells how he was induced, by reading the experiences of a practitioner of 1755, to try the balsam of copaiba as a local application to wounds. He used it first upon an indolent granulating surface, applying it upon an absorbent dressing, which was saturated with the balsam and then squeezed tightly to drive off the excess of the drug. The unusually rapid growth of rosy granulations was so evidently due to it that he was encouraged to employ it more generally, and finally adopted it as his regular dressing for granulating surfaces. His colleagues have also begun to use it in their wards. It is especially suited to the flat, pale, granulating surfaces that generally result from avulsions of the scalp, to extensive burns and scalds and to the cavities left after the removal of carious or necrosed bone. At the hospital it is applied on cotton waste, which is first picked apart and cut into bits by the convalescent patients. The balsam is absorbed by this porous dressing which it partially disinfects and to which it imparts a fragrant smell.

Thinking that the good results obtained might be due to the copaibic acid contained in the balsam, Dr. Beach experimented with the acid, but he found that it had no good influence on the wounds. The copaiba balsam dressing is cheap, simple and quickly prepared.—*Md. Med. Jour.*

Change of Gauge.—On the afternoon of October 16, at 3 o'clock, a force of several hundred workmen commenced the work of changing the gauge of the Hot Springs Railroad, and by noon of the following day it was a standard gauge road. All the new rolling stock for the road has arrived and is ready for use. Henceforth visitors to Hot Springs occupying the sleeping car can come through without having to change cars. This change will be of great benefit to invalids who go to the Springs.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,
EDITOR.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, OCTOBER 19, 1889.

A GOOD MAN GONE WRONG.

In the October number of the Virginia *Medical Monthly*, we notice an article by Lewis G. Pedigo, M. D., entitled "A Vindication of the Study of Hypnotism." It seems that Dr. Pedigo had read a paper on hypnotism at the late meeting of the Virginia State Medical Society; Dr. Hunter McGuire of the same State was afterwards interviewed by a newspaper reporter, to whom he proceeded to unbosom himself as follows.

"This lecture on hypnotism was the 'feature' of the Society's proceedings on the same principle that the performance of the trick mule is the feature of the circus. It was very well written, but it was on a subject in which the Society takes no interest. I regard hypnotism as nothing more than old fashioned mesmerism, and take about as much stock in one as the other; which is to say, none at all. There is a rule of our Society—one among the first in the list, in fact—which states that the Society is not responsible for the individual opinion of its members, and that rule applies to this case. The other physicians present fully concurred in this view."

Dr. Pedigo addressed a note of inquiry to Dr. McGuire and received an answer in which the latter disclaimed any intention of being personal, and made use of the following expressions: "I spoke of hypnotism as a 'trick mule,' and not your lecture. * * * I have no belief in hypnotism whatever. * * * It was practiced many years ago by the early Greeks, from whom, probably, Mesmer took the idea. Under different names it has over and over again been reproduced. It comes now as hypnotism. In a year or two it will again disappear probably to be revived in twenty or thirty years.

"It was discarded because it produced hysterical troubles in some, and in some insanity. In women it is unsafe and not free from great danger. To my mind it is associated with 'charms and incantations,' and all who strive to establish medical practice on a scientific basis must discredit it." This evoked the article from Dr. Pedigo above referred to.

Dr. McGuire has a national reputation and any opinion coming from him carries with it some weight, but in making the above statement he goes a little too far. In attempting to sum up his creed, we find—as Dr. Pedigo expresses it—that he regards hypnotism "as a subtle and (systematically) dangerous *nonentity*." With all due respect, the remark that "all who strive to establish medical practice on a scientific basis must discredit it" is gratuitous, and verges slightly upon the absurd, besides being an injustice to a number of undoubtedly honest and careful observers who are endeavoring to add a new therapeutic agent to our armory.

He certainly has a right to his belief, but the promulgation of such views among the laity must be productive of much mischief, and add to the difficulties by which the science of medicine is already hampered. In this connection the rule of the Society, to which he refers, is decidedly *apropos*.

COUNTER-PRESCRIBING.

The subject of counter-prescribing is one concerning which much has been written without much effect apparently, as regards the discontinuance of the practice. In the drug journals, to their credit be it said, one occasionally notices articles discountenancing the habit, but numbers of druggists believe in the proportionate value of the bird in the hand and that in the bush as laid down by the old saw, and prefer to dose out medicine on the spot to taking their chances with competitors of filling the prescription written by a physician. The physician does not suffer much from counter-prescribing, probably, as the more serious cases come to him at the end anyway, and in such it is the patient who suffers by not coming to him at once.

Belonging to the same class of impositions is the prescribing of glasses by opticians. Queen & Co.. of Philadelphia have recently sent out through the mail impudent invitations to citizens of Philadelphia, written as private personal notes, of which the following is a sample:

DEAR MADAM.—We should be glad to have you consult us in reference to your eyes. We have been fitting glasses for over thirty years, and after careful study of the subject have adopted a new method of examination which is wonderfully effective.

One visit to our store is all that is required, consequently both a great amount of time and expense are saved.

The glasses we furnish cannot fail to give you a great deal of comfort. Yours truly,

QUEEN & Co., Opticians, Scientific and Artistic Spectacle and Eyeglass Makers.

Concerning this the *Medical News* has the following

to say: "Probably the greatest risk in this over-the-counter prescribing by opticians is the fact that many people, thinking failing sight due to opticle errors, are given all manner of useless glasses, when the fault may be changes of the choroid, retina, optic nerve or crystalline lens. Within the past three months we have been informed of three cases who were given glasses by this optical company, in one of whom there was beginning cataract, with much gray degeneration of the optic nerve due probably to spinal trouble; in another, albuminuric retinitis; and in the third, chronic glaucoma in which the central vision was still good, but the field of vision greatly contracted, and operative interference urgently demanded."

This practice is not confined to Philadelphia by any means; there are in all large cities enterprising opticians with an imposing array of test glasses, test letters and other paraphernalia by which the gullible portion of humanity may be impressed with the extent of the optician's scientific acquirements and his reliability as a guide in the treatment of failing sight.

The remedy is obvious and easily applied when the physicians begin to understand the extent of such encroachments upon their legitimate domain; in the meantime it is the patient who suffers most usually.

Catheterization of the Ureters.

At the meeting of the Academie des Sciences, Sept. 2, M. Sappey presented, for M. Poirier, a note on this subject which may prove of the greatest service in differential diagnosis of inflammations of the genito-urinary tract.

The essential condition for success in the daring exploits which modern surgery of the kidneys justifies, is a preliminary positive diagnosis as to the health of the other kidney. Many difficulties have presented to prevent this, though many more have been surmounted by ingenious devices and methods. To obviate any uncertainty in the matter at all, it only remains to be able to draw urine directly from the ureters, enabling the physician to examine the products of both kidneys separately.

M. Poirier now claims to be able to do this with ease and certainty; and says that by following his method any surgeon can perform the operation with equal facility. It is done with the aid of a cystoscope. The instrument of Desormeaux, perfecte dby the addition of an incandescent lamp at the extremity of the sound, and in conjunction with an optical apparatus, is easily managed and of undisputed utility.

In his first experiments made on cadavers, the author used the Nitze-Leiter cystoscope; later he used the cystoscope of Boisseau, which lights up a greater area. He invariably succeeds in a few minutes, as well with men as with women, in introducing into the ureters the catheters he has devised for the purpose. The difficulties with which the cystoscope meets in tumors of the bladder do not appear in this operation; and with the smallest amount of experience, the operator soon finds the entrance of the ureter and inserts the catheter into it. Twice in the last two months he has done it on the living subject, and the second time at l'Hopital Beaujon, some of the assistants repeated it after him.

Poirier thinks that henceforth surgery is in possession of the simple and practical means for catheterizing the ureters, for which it has searched so long.

Not only this, but it opens the door for other manœuvres in the ureters and pelves, such as washing them out, dilatation of the vesical end of the ureter to allow of the passage of a retained calculus, etc.

Colon-Flushing in Typhoid Fever.

As the germ theory of disease comes more and more into prominence, and in proportion as corroborative evidence of its truth is heaped up, so we find that proposed therapeutic measures based on that theory are meeting with a warm welcome from most members of the medical profession. This method of treatment has been more or less successful, but on the whole the results have been extremely encouraging. To throttle the microbe in his lair by means of appropriate germicides seemed at first to be the ideal treatment, and although this succeeded in many instances, in others it proved a total failure, and for this a number of reasons were assigned. One was the oft-repeated fact that the remedies could not be used in sufficient strength to be effective without endangering the welfare of the patient. Another reason was afforded by the discovery that in many diseases the chief danger comes from the absorption of toxic alkaloids generated by the germs, and not from the latter directly. It was found that in many cases the action of the germs was self limited, and that the system was perfectly competent to take care of them, provided that the toxic effects of their alkaloids were in some way avoided or nullified. Numbers of methods to compass this end have been proposed, and one suggestion that we do not remember to have seen before is that of flushing the colon in typhoid fever, by A. P. Buchman, M. D., in the *Med. Rec.* This plan, which would seem at first sight to promise good results, has been used by him in only a small number of cases so far, but with excellent effect.

The thorough and systematic flushing of the colon one to three times daily with a warm, weakly antiseptic solution is a therapeutic suggestion of no mean value, and one deserving of a careful trial. Of course there are dangers to be guarded against, such as over-distention, and possibly exhaustion, which will readily suggest themselves.

From his trials Buchman draws the following conclusions:

"1. That from one to three quarts of cold water can be easily and safely passed into the colon, which will readily lower a high temperature.

"2. That I believe in some of the cases the water passed the ileocolic valve, entering the small gut.

"3. That tympanitic distension will always disappear with passing away of the water so injected.

"4. That putrefactive fermentation of the bowel contents is prevented by such use of water.

"5. That toxic substances are more readily absorbed by the cæcum than by any other portion of the intestinal canal, and that by a judicious and careful washing with antiseptic water, we can prevent the absorption of such toxic substances and prevent and modify general systemic poisoning.

Excision of the Clitoris in a Child, for Nymphomania.

Dr. J. A. Sutcliffe, of Indianapolis, reports in the *Ind. Med. Jour.*, the removal of the clitoris of a seven year old child, who had long evidenced the passion of nymphomania. The operation was entirely successful, and the patient thereafter showed no more inclination to masturbate.

In speaking of the justification of the procedure, Dr. Sutcliffe says:

The various text-books denounce the operation in the most emphatic manner. Erichsen expresses his views as follows:

"Removal of the clitoris, even though not enlarged, was some years ago recommended and extensively practiced as a means of curing some forms of epilepsy and of erotomania. This is an operation as unscientific as it would be to remove the glans penis for the cure of similar affections in the male, and one that the experience of the profession has proved to be as useless in its results as it is unscientific in its principle."

Gross and other high authorities treat the subject in the same manner. With the greatest deference for these high authorities, I cannot think that amputation of the clitoris is analogous in its results to amputation of the penis. The penis has associated with it the urethra, and is essential to the act of coition and to procreation. The clitoris is simply a rudimentary penis without the urethra, and aside from the sensibility of its papilla has no important function to perform. The rugæ of the vagina are richly endowed with sensitive papillæ, and it is questionable to what serious extent sensibility is destroyed; especially in a child where possibly the remaining papilla may take on increased functional activity. In the absence of any assignable cause in a child, save slight hypertrophy, I am unable to see why a clitoris should not be removed, or its papilla destroyed with the cautery, when it becomes a constant annoyance and nuisance to its possessor and her relatives. At any rate the prompt and permanent relief given in the above case was such as to justify the operation. It proves that there are exceptions to the general rule laid down by the authors on this subject.

MEDICAL ITEMS.

For Hiccough.—Dr. Brinkerhoff has used small quantities of calamus in several cases of aggravated hiccough, and always with success.

Vive la France.—The French legislature has passed a bill to the effect that the physician's claim on the estate of a deceased patient shall take precedence of all others.

Thallin in Gonorrhœa.—John M'Car, in Dublin *Jour. Med. Sc.*, reports a case of fresh, acute gonorrhœa in which he used daily injections of thallin sulphate in 5% solution, recovery ensuing in five days.

Abortive Treatment of Furuncles:—

℞ Hydrarg. oxid. rubr., - - gr. ij.
Lanoline, - - - - ʒij.

M. Sig. Rub in for three or four minutes, several times during the day.—*Bulletin Med.*

A Curious Case of Poisoning is reported from New South Wales. A woman who was suckling twins took a dose of chlorodyne at night and suckled the twins afterward. In the morning they showed signs of narcotic poisoning, and died during the day.

Iodine for Warts.—It is stated (J. Mosse, *Lyon Med.*) that ten minims of tincture of iodine, taken in half a glass of water twice daily, will cause the disappearance of warts. The doctor has tested the drug in ten cases, with success in all.—*Can. Lancet.*

Probably to be taken *cum grano salis.*

The Late Dr. Habershon.—The fatal disease in his case was shown by a post-mortem examination to have been gastric ulcer, thus confirming his own ante-mortem diagnosis. Curiously enough this was the very disease which he had studied most during life, and in which he had been called in consultation most frequently by his colleagues.

Treatment of Hydrocele.—A number of surgeons are returning to the old treatment of hydrocele, by evacuating the sac, and passing a probe, on the end of which some nitrate of silver has been fused, through the canula and thus cauterizing the walls of the sac. It is more simple and clean than the iodine treatment, and posesses the same advantages.

An Ancient Medical Work.—Undoubtedly the oldest medical work extant is the papyrus found recently by George Ebers, the well known writer and novelist. Dr. Ebers has just translated and published that portion of the manuscript relating to ophthalmology, which must have been written more than one thousand years before Hippocrates was born. The papyrus is said to contain much of interest.—*Med. News.*

Heroic Treatment for Phthisis.—Dr. Briand, a young French physician attached to the hospital at Villejufi, attempted to cure comsumption by gradual exposure to cold air. It is said the results were such that several of the patients on whom the "elixir" treatment was tried now sleep on the open ground in all weathers, and with never a complaint.

For Toothache.—A piece of absorbent cotton moistened with the following and packed in the hollow of a carious tooth is said to be excellent in toothache:

℞ Chloral hydrate, - - - 5 parts.
Powd. camphor, - - 5 "
Cocaine hydrochlorate, - - 1 part.

M. If necessary the application may be renewed several times.

The Prevention of Mammary Abscess.—In the first stage of mammitis, Miall (*Med. News*) recommends that cloths be dipped in a solution of ammonium carbonate, one ounce to a pint of water, and used as a fomentation. The solution is applied warm, for from half an hour to two hours, the nipples being protected. Relief is often immediate, and it is seldom that more than three applications are necessary.

A Useful Ink.—It is stated that a Paris stationer has invented an ink warranted to fade off the paper in a week, without leaving the slightest trace. To say nothing of the advantages of such a discovery to fickle lovers and shifty politicians, the use of this convenient liquid may perhaps commend itself to medical practitioners who have strong opinions on the question of vested interests in prescriptions.—*Ex.*

Latest Application for Hypnotism.—The authorities of Wolverhampton,England, are in a quandary over a case of criminal hypnotism for which they cannot "make the punishment fit the crime." A worthless fellow named Albert has been hypnotizing clerks and making them believe a copper coin was a sovereign. With this small sum he would buy a sovereign's worth of merchandize or receive the due amount of change for some smaller purchase.

To Avoid the Toxic Effect of Quinine.—M. Coglitoire has found that the toxic action of quinine, so pronounced in some people, may be avoided by combining it with ergotine and opium. He recommends especially the following formula:

℞ Quin. sulph., - 0.75 gm. (gr. xij).
Ergotine, - - - 0.50 " (gr. viij).
Pulv. opii, - - 0.05 " (gr. j).

M. Div. in chart iij. Sig. Take one every hour.—*Lyon Med.*

Chorea.—Prof. H. C. Wood says that antipyrin is a more successful remedy than arsenic. With the latter he average duration of treatment is sixty to ninety days. With antipyrin he has succeeded in completely arresting convulsive movements within one week.—Albany *Med. Jour.* And so it goes on; the list of diseases which beneficent antipyrin can conquer appears to be almost endless. Before long it may be possible to save time by making a list of the things which it cannot, rather than of those which it can benefit.

An Equine Freak.—It is generally considered impossible for a mare-mule to foal; two authenticated instances of this occurrence are now on record. A mare-mule at the Paris zoological gardens has twice become a mother, and lately, on the ranch of Mr. T. Dyer, near Cheyenne,Wy., a mare-mule dropped a colt which gives every promise of living. The colt is of a calico color, and while the body is that of a horse, the ears are long and the head mulish. The sire is a Norman stallion.

Medical Education of the Masses.—A reporter of the *Pittsburgh Dispatch* "does up" an amputation for the delectation of his readers and explains the great care taken "to keep small insects out of the wounds."

"After the leg was severed from the body," says the scribe, "the stump was scraped very carefully; the chloride of mercury was kept flowing constantly over the wound to kill any insects that might be drawn by the wound. The doctors hold that the air is full of poisonous germs, which are attracted to a wound where blood flows. All the linens and gauze which are used in operations are soaked for twenty-four hours in bichloride from 100 to 500 per cent in strength. This is done to prevent the slighest irritation after the operation has been performed."

FROM THE ITALIAN.

By Dr. Joseph Grindon.

The Endocellular Cytophagic or Parasitic Protozoa.

A. Celli in *Gaz. Med. Lomb.*: In this short work the author gives three of his lectures on the cytophagic parasites in general, and on the pathological microbe of malaria in particular.

The author describes the latter as follows:

"If a small quantity of blood (half a gramme to a gramme) be extracted, with due antiseptic precautions, from a vein of the arm of a malaria patient, preferably just before the onset of fever, and be immediately injected into a vein of a healthy person who has never had a miasmatic fever and resides in a salubrious locality, there will be developed, after a varying period of incubation, a fever due, as Gerhardt, and later Marchiafava and myself still better have demonstrated, a true and real malarial infection. This shows that the cause of the disease resides in the blood of the sufferer from malaria. What is that cause?

"All attempts at cultivation in the most varying

media, and in the various fevers or phases of fevers have remained fruitless, even when the same blood had reproduced malarial infection through inoculation; and innumerable microscopical examinations of freshly drawn blood subjected to the most diverse staining methods, have resulted negatively from a bacteoriological standpoint. How can we then admit bacteria to be the pathogenic principle of malarial blood?

"What then do we find in this blood?

"In the red corpuscles are to be seen small masses of plasma, possessing lively amœboid movements, and which for that reason assume the most varied forms, or, the movements ceasing, appear as rings which look as though stamped on the red corpuscles, the background of the latter being seen through the dense central part of these masses. They are always to be found in all acute malarial infections; solitary or nearly so in a few primary fevers. In the pernicious fevers they occur sometimes in such numbers that two thirds or more of the red corpuscles are invaded by them.

"In many quotidians, in tertians and in quartans, when the progress of the disease has not been arrested by quinine, they continue to develop and to grow, nourishing themselves at the expense of the blood cells, and transforming the ingested hæmoglobin into a black pigment. There may then be observed within the red corpuscles amœboid masses, full of granules of black pigment in lively Brownian motion, which masses,litt le by little, end in invading and destroying the entire red corpuscle.

"Then follows another phase. The mass of plasma splits up into molecules while the black pigment granules (it these be present) crowd toward the center.

"The molecules resulting from this splitting up are either rounded or pyriform (Golgi) or fusiform; separating off and becoming free in the plasma they invade new blood cells. This phase oftenest coincides with the chill. (Golgi).

"These forms are not, however, the only ones to be seen.

"In a few obstinate autumnal fevers one finds on certain rare occasions (this year nine or ten times in about 2000 cases) falciform corpuscles (bodies No. 1 and No. 2 of Laveran and Richard) for the most part with a double contour, sometimes brighter at the poles and always showing the pigment grouped at the center and motionless. These corpuscles, as well, complete the first stages of their development in the interior of red corpuscles. At the same time one may discover fusiform and ovoid shapes, of a similar structure, sometimes in the interior of red corpuscles, and again at times, forms possessing an undulating or flagellated contour, consisting of a nucleus of pigmented protoplasm at the center and with two or three long and stout mobile filaments attached to the border. (True parasites of Laveran)."

From the fact that none of these forms are to be found in the blood in any disease but malaria, the author concludes that the finding of these same forms possesses a diagnostic importance in cases of fever of uncertain origin.

But one may ask whether the above-mentioned forms be the cause or the effect of malarial infection? The author does not hesitate in considering them the cause.

Ichthyol as an Adjuvant to Mercury in the Treatment of Syphilis.

Peroni in *Il Morgagni*: Experiments on the use of this medicament in the treatment of syphilis, in the clinic of Prof. Gibello, of Turin, would lead the writer to regard ichthyol as a valuable adjuvant in the treatment of cases of this class.

Of the 28 cases treated, 12 were primary sores, 4 were disquamative, 2 pustular and 3 papular syphiloderms; 3 were cutaneous gummata and 4 were severe specific adenopathies.

In these, ichthyol was given internally, in doses of from ½ to 2 grammes daily, and externally painted over the specific lesions in aqueous or etherial solution in the strength of 5% or more, or even used pure. The best results were obtained by combining it with salicylic acid. It is well borne and prevents the occurrence of stomatitis when used with mercury in deep injections. Some of these experiments have extended over a period of 14 months, and the writer has observed no relapses. The use of the ichthyol rapidly improved the general and local condition. In the latter, besides prompt and rapid healing, there were obtained smooth, soft, pliant cicatrices, non adherent and without deformity. It may be expected to give similar results in other lesions.

The writer uses the remedy externally until the disappearance of local lesions, and internally, in the above mentioned doses for several months.

The Treatment of Spinal Diseases by Suspension.

De Renzi thus sums up his results in the *Rivista Clinica e Terapeutica* for August:

The treatment by suspension was applied in 13 clinical cases presenting divers affections of the cord, as follows:

Tabes dorsalis,	7 cases.
Tabes ataxo spastica	1 do.
Multiple sclerosis,	2 do.
Chronic meningo-myelitis,	2 do.
Hæmorrhagic meningo-myelitis,	1 do.

Of the 7 cases of tabes dorsalis, 3 gave no result. It should however be said that of these three, one underwent only one suspension, another two, and the third, five.

In the other 4 cases of tabes dorsalis there was improvement of the lightning like pains. In one of these they disappeared entirely, and in the other three they were markedly lessened. Locomotion was improved in all four cases.

Locomotion was appreciably improved in the case of ataxo spastic tabes.

In the two cases of multiple sclerosis there was marked improvement of the spastic gait.

Of the two cases of chronic meningo-myelitis, one was cured and the other improved.

The case of hæmorrhagic meningo-myelitis gave no results.

In conclusion then, it may be stated that the suspensions were well tolerated by all the patients, none of whom presented any disturbances referable to this cause.

In tabes dorsalis it produced improvement of the ataxic phenomena as well as of the lightning like pains. In multiple sclerosis it determined an amelioration in locomotion.

In chronic meningo-myelitis it obtained a cure in a case in which the meningeal lesions predominated, and improvement in another. It was without benefit in the case of hœmorrhagic meningo-myelitis. These facts are in general favorable to the hypothesis that suspension is beneficial in affections of the cord, destroying adhesions of the meninges and facilitating circulation in the cord itself.

BOOK REVIEWS.

Essentials of Materia Medica and Therapeutics. By Henry Morris, M.D., Late Demonstrator Jefferson Medical College, Philadelphia; Co-Editor Biddle's Materia Medica; Visiting Physician to St. Joseph's Hospital; Fellow, College of Physicians, Philadelphia, etc. Cloth, price $1.00; interleaved, $1.25. W. B. Saunders, Philadelphia.

This little book of 250 pages is No. 2 of a series of similar works entitled Saunders' Question-Compends. It is quite comprehensive, and gives a great deal of practical information in a concise form, so that it can be taken in at a glance. It is up to the times, and includes a number of late remedies, our previous knowledge of which had been derived from scattering statements of doubtful accuracy in the various journals. A number of good suggestions on the art of prescription-writing form a part of the book and add considerably to its usefulness. While the work will not, and is not intended to, supplant the large text-books, it should prove invaluable as a hand-book to the busy practitioner, as well as to the student preparing for his examinations.

Malarial Centres of the World.—The great centres of malarious diseases in different parts of the world are:

1. In America, on the shores of the Gulf of Mexico, the West India Islands, the northern portion of South America, and the deltas of the Amazon, the Orinoco, and the Rio del Norte.

2. In Asia, India, Borneo, China and Ceylon.

3. In Africa, more especially in the countries around the Gulf of Guinea on the west, Madagascar and Mozambique on the east, Algeria, and the shores of the islands of the Mediterranean on the north.—*Dr. Ellis in Lancet-Clin.*

SOCIETY PROCEEDINGS.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Annual Meeting held at Evansville, Ind., Sept. 10 to 12, 1889.

Dr. S. E. Mumford, of Princeton, Ind., read a paper entitled

Perineorrhaphy — The Immediate Operation.

While accurate statistics of rupture of the perineum were not attainable, the author considered this injury to be vastly more frequent than was thought to be the case by the profession. This was to a great extent due to the habit of many practitioners of not examining the woman at the close of labor. He advised that this be never neglected.

If the tear involve only the fourchette, nothing need be done. If it involve more than this, the woman should be placed on a table in front of the window, and the operation should be carried out with all the care and precautions that are observed at secondary perineorrhaphies. Failures in primary operations are usually due to faulty closure of the wound.

The author was emphatic in his preference for the primary operation wherever it could be performed.

Discussion.

Dr. Ludson Worsham, of Evansville, considered the paper one of the most important that could come before the society. At first is the time above all others that you can gain the woman's consent to have the operation done; and when she recovers from the lying-in state she is well. The operation should be done as thoroughly then as it is afterwards, too.

Dr. Joseph Eastman, of Indianapolis, agreed with the gentlemen in the main, but he thought that there were exceptions, such as extremely œdematous conditions of the parts, swollen feet, uræmia, albuminuria, etc., which indicate that it would be better to defer the operation until later.

Dr. Guido Bell, of Indianapolis, suggested that the tear might occur on the inside, so that it is necessary not only to examine on the outside for a rupture, but also on the inside.

Dr. N. M. Basket, of Moberly, Mo., doubted if it were reasonable in all cases to proceed to operate at once; he thought, with Dr. Eastman, that certain conditions could preclude it. He wished to know the best method of preventing a tear; and inquired if it were always the head that caused it, or sometimes the shoulder?

Dr. W. H. Wathen, of Louisville, agreed most heartily with the author of the paper—that those who do not have ruptured perineums do not examine for them. It is impossible to prevent it. Those who claim to prevent it have probably ruptured more perineums than they have saved.

As to the treatment, he advised that if the laceration has not involved the deep layer or the muscles, nothing

be done; but if it has extended into the rectum, or the muscles are torn, he considered the primary operation absolutely indicated. He regretted to hear the author of the paper magnify, as he thought, the difficulty of the operation, which he considered about as simple as any operation in surgery. Imperfect results were often due to a want of knowledge of the details of anatomy of the parts. No speculum is necessary, and a single straight needle may be used. He advised the use of the kangaroo suture.

Dr. Mumford said that for the sake of brevity he had not stated that it would be better to wait in cases of œdema, albuminuria, etc.

Dr. W. C. Chapman, of Toledo, O., read a paper on

Prognosis in Pulmonary Diseases.

The majority of cases of incipient phthisis he considered to be curable. No healthy lung tissue can be invaded unless a nidus has been formed previously for the attachment of the tubercle bacillus. There must be a general, as well as a local, predisposition. As the bacterium reaches the spot which affords it attachment, that is all that is needed.

With reference to the old-fashioned manner of treating by nutrition, he thought that over-feeding and over-exercise were harmful. Mental activity must assist nature in attaining a cure. The surroundings must be pleasant; no consumptive hospitals or other gloomy habitations should be advised under any cir cumstances. They were positively injurious. Daily expansion of the lungs with healthful exercise and the fulfillment of the other conditions would cure the majority of cases. When the disease becomes further advanced, the majority of cases will not be cured, no matter what be the treatment. We are then reduced to alimentation and the use of pure air in the treatment. Hot air and other germicides are worthless. As the vital energy is restored, the prognosis is the more favorable. The reader did not believe there was justification for giving up all hope even in these advanced cases. Autopsies have shown cicatrics from previous extensive destruction of lung tissue.

Dr. C. F. McGahan, of Chattanooga, Tenn., read a paper entitled

A Review of the Treatment of Pulmonary Phthisis.

Like that for other diseases, the treatment for this affection has undergone great changes. A hundred years ago it was treated with depressants, blood letting and low diet, etc. Lebeau first made the declaration that consumption, being due to a parasite, the treatment should be directed against this. Afterward respiratory apparatuses came into vogue. The author had used these, but he believed that the benefit derived from them was due to the lung-gymnastics. Inhalations of terebinthenated substances have been lauded. The reader thought that if carbolic acid, creasote, eucalyptol, etc., could be placed directly into the center of the cavity early in the disease, they would do good, but later on they were harmful.

The hydrofluoric acid treatment was recommended some time ago; Herard and others endorsed it highly, but Grancher and Chanteaud said it only lessened the virulence, but did not cure. The reader failed to see in what cases it could do good. Dujardin-Beaumetz thought there was some good in sulphurous acid as a remedy. The Bergeon treatment, though endorsed by all the eminent authorities, soon sank into oblivion. Benefit was sometimes derived from the use of iodoform in ether, as a spray. The Russians have advocated the meat diet. The use of creosote is backed by very favorable statistics. It causes improvement in all symptoms. I use 14 drops a day, gradually increasing the dose as opportunity permits, lessening it again if irritation of the stomach begins to be manifested. Guiacol is sometimes borne when the other is refused.

The views of Weigert regarding the hot air treatment are not coincided with by many. For a decision as to this treatment we must wait for further experience.

But of all forms and kinds of treatment, none are better than the climatic. The best climate is a moderately cold, and yet dry one. The author opposed the sending of patients to the sea coast, or to Florida, except, perhaps, in the last stages of the disease. We must guard the stomach by all means. If upon repeated trials any one treatment is found to disagree with the stomach, it must be discarded. Iron and cod-liver oil should, therefore, be given in limited quantities. The patient should have an abundance of fresh air and a minimum amount of medicine. Milk is good; if this disagrees, the juice squeezed from fresh meats may be substituted. Fever is best combated by rest, phenacetine and antipyrin. Night sweats may be controlled by giving something to eat just before retiring; if that does not suffice, then resort to medicaments. Tr. of opium, acetate of lead, etc., for diarrhœa.

SOCIETY NEWS.

The American Public Health Association.—The seventeenth annual meeting of this association will be held at Brooklyn, N. Y., Oct. 22, 23, 24 and 25.

The Southern Surgical and Gynecological Association which holds its session at Nashville, Tenn., Nov. 12th, 13th and 14th, 1889, has issued a preliminary programme. The meeting promises to be a large and successful one. Upwards of forty papers by eminent members of the southern profession are already on the list.

The McDowell Medical Society.—Concerning the meeting of this association, which is to be held at Henderson, Ky., Nov. 11th and 12th, Dr. Arch Dixon, of Henderson, writes us as follows: "As the Southern

Surg. and Gyn. Association meets at Nashville, Nov. 12, 13 and 14, those who attend that meeting from the West and Northwest must necessarily pass through Henderson, as we are on the direct line to Nashville. By leaving home one day earlier, they can stop over here, attend our meeting, help "carve dat possum," leave Henderson at 2:20 and be in Nashville to breakfast the morning of the 12th."

We heartily advise our friends to embrace the opportunity thus presented, of partaking of both of the scientific and social feasts, with the expenditure of so little extra time.

THE AMERICAN ACADEMY OF MEDICINE.—The American Academy of Medicine is endeavoring to make as complete a list as possible of the Alumni of Literary Colleges, in the United States and Canada, who have received the degree of M.D. All recipients of both degrees, literary and medical, are requested to forward their names, at once, to Dr. R. J. Dunglison, Secretary, 814 N. 16th Street, Philadelphia, Pa.

SELECTIONS.

A CASE OF GALACTOCELE TESTIS.

BY HY. S. COCRAM, R. S.

Clinic of Dr. A. B. Miles, House Surgeon Charity Hospital.

On the morning of August 7, 1889, a man applied at the hospital for treatment, apparently suffering from severe nervous trouble. He was hypersensitive and displayed an unusual amount of excitement, losing almost entire control of speech when questioned, and replying in the most simple manner, showing a decided lack of concentration; the mind was almost wandering. During the conversation he stated that three months previous he noticed a slight swelling of the scrotum, and that it had continually enlarged from that date. Dr. Archinard and I made an examination and found a tense scrotal tumor containing at least a pint of fluid. Simply to confirm the diagnosis of hydrocele we punctured the tumor with a hypodermic needle, and much to our astonishment withdrew an opaque liquid of about the color and consistence of milk. Desiring to ascertain the cause of this discoloration and what the fluid contained, I took it to the pathological department for a microscopical examination, where it was found to contain numerous fine granules in a state of active movement, as set forth in the following report of Dr. A. McShane, Assistant Pathologist:

"A drop of the milky fluid was examined under the microscope, and in it was found a great multitude of light, almost transparent granules which were all in very active motion. The granules did not refract light very strongly. In this respect they differed from fat granules which, furthermore, do not wriggle about as these granules did. In a fatty emulsion, the fat globules have not the Brownian movement, but they stand perfectly still. The milky appearance of this fluid was not due therefore to emulsified fat.

"In order to ascertain if the actively moving granules were bacteria or other microorganisms, a drop of the fluid was allowed to dry on a cover-glass and then stained just as is done in staining for the bacillus tuberculosis. Three cover-glasses were smeared and stained; 1, with magenta (Ziel's solution); 2, Loefler's solution (methyl blue); 3, hæmatoxylon. If the granules had been bacteria, they would have become fixed and stained, and would have appeared under the microscope as distinct points; but instead of distinct dots, nothing could be seen except large films of coagulated or hardened albuminous matter, resembling the ordinary mucus that shows up in streaks whenever we stain sputum.

"The hydrocele fluid was odorless. The granules could hardly have been bacteria, for, 1, there wa no possible way of entering from without; 2, the processes of their nutrition would have resulted in the formation of fetid matter.

"I incline to the belief that the granules were particles of albuminous matter (non-reproductive), having the Brownian movement."

I then reported the peculiarities of the case to Dr. Miles, showing him a specimen of the fluid. He accompanied me to the ward to make another examination. As we entered the ward the patient, in a most excited manner, stated that the water had "evaporated." An examination showed that the tumor had decreased in five hours about two-thirds of its original size. Instead of being tense and presenting the appearance of a well-filled bag, it was loose and flabby, conveying to the touch a gelatinous sensation of redundant tissue. At this stage the tumor bore no resemblance whatever to a hernia, every symptom indicating the presence of some variety of liquid in the vaginal tunic. The tumor rapidly diminished in size until the following morning, when the scrotum was almost, if not entirely normal.

Tne patient was dismissed 24 hours after his admission, apparently perfectly cured with no other instrument save the puncture of the needle of a hypodermic syringe.

The patient reported for examination the day after his dismissal, and again, five days later. On each occasion the swelling in the vaginal tunic seemed smaller; it still had the same gelatinous feeling, though somewhat firmer. Evidently absorption of the watery portion of accumulation was progressively going on, and the parts were rapidly returning to their normal condition. The advent of the tumor was that of a typical hydrocele. Throughout its entire course there was not the slightest constitutional disturbance. What this tumor was, having been there for three months, and why it should have disappeared immediately after the puncture is certainly as obscure as it seems irrational.

In Birch-Hirschfeld's *Pathologische Anatomie* we find some mention of galactocele. He says: "The cases of

hydrocele observed in tropical regions, the contents of which have a milky appearance (galactocele of Vidal) and apparently arising spontaneously, are probably allied to the previously mentioned cases of chylous ascites, caused by parasites," (page 1192). The paragraph referred to reads as follows: "A new animal parasite of the peritoneum was discovered by Winckel in a woman who had lived a long time in Surinam, and who suffered from ascites. Upon tapping the abdomen, a fluid resembling buttermilk was withdrawn. Under the microscope this fluid was seen to contain an enormous number of worm-like entozoa in active motion. Each parasite had a slender, rounded head upon which 4 or 5 ciliæ could be seen, and a sharp pointed tail. These organisms were 0.2 mm. long (= $^1/_{125}$ inch), and 0.1 mm. broad (= $^1/_{200}$) inch. Winckel thinks that it is probable that this parasite is identical with the one discovered by Lewis in India, the *Filaria sanguinis hominis*, which causes chyluria."

Another kind of liquid tumor of the testicle is described by Birch-Hirschfeld, namely, spermatocele. Of this he says: "The finding of spermatozoa in the fluid of hydrocele was explained by the early observers as due to the rupture of dialated seminal canals on the surface of the testicle, whereby the contents of the glandular tube became mixed with the hydrocele fluid. Careful anatomical examination, however, showed that the spermatocele did not lie in the cavity of the vaginal tunic, but in special cystic places. The sperm-cysts develope as a rule in the head of the epididymis, more rarely in connection with the *Rete vasculosum testis*. The cysts may attain considerable size; in Steuder's case 350 grams (nearly 12 ounces) of fluid was withdrawn. The contents are sometimes normal semen containing rapidly moving spermatozoa, and sometimes the fluid is increased and the spermatozoa lose their tails; finally, simple serous cysts may probably arise from sperm-cysts."

Now, how shall we classify our cases? It was not due to the *filaria sanguinis hominis*. It was not due to chylous ascites, for there was no communication between the vaginal tunic and the general peritoneal cavity. It was not a spermatocle containing tailless spermatozoa, for the liquid lay undoubtedly within the cavity of the vaginal tunic, and not in any superficial cyst springing from the body of the testicle, and lying outside the cavity of the vaginal tunic; morever, if the moving granules in the liquid had been tailless spermatozoa, they would have hidden their diminished heads.

Our case does not accord with any of the cases mentioned in Birch-Hirshfeld's exhaustive work, and it seems to be unique.—*New Orleans Med. and Surg. Jour.*

ANTISEPTICS IN DISEASE.

Dr. T. Lauder Brunton, in the Croonian Lecture delivered last month at the Royal College of physicians, London, stated *inter alia* that "The indications for the treatment of disease depending on microbes are: first, to remove as far as possible both the microbes and the poisons they have formed; secondly, to neutralize the injurious effects of any poisons already absorbed into the blood; thirdly, to prevent the growth of microbes and the formation of poisons. These principles have been empirically carried out in the treatment of diarrhœa by castor-oil as a purgative, followed by the administration of carminatives, such as cinnamon and cloves, which are antiseptic. In applying antiseptics internally, we are obliged to consider the effects they produce upon the organism. A small dose is needed of creasote or carbolic acid to arrest fermentation in the stomach, because it can be directly applied to the microbes; but in disinfecting the intestine, either the remedy must be insoluble enough to pass through the stomach, or it must be tolerated in large quantities. Naphthalin corresponds to the first of these remedies, and so to some extent does salol, which, after passing the stomach, splits into salicylic acid and beta naphthol. Resorcin, thymol and benzoate of soda have somewhat similar properties. Amongst the aromatic compounds, Pellicani has found that substances containing a diphenyl nucleus are at the same time least poisonous and most powerfully antiseptic. The poisonous effects of phenol are very much reducod by combination with sulphuric acid, and phenyl-sulphuric or sulpho-carbolic acid forms salts with bases, which, though slightly less antiseptic, are very much less poisonous than carbolic acid. There is another group of compounds in which the atom of sulphur, instead of being united by means of oxygen to the aromatic nuclens,is attached directly to one of the carbon atoms in that nucleus. Such a one is ortho-phenol sulphonic acid or aseptol, which has been introduced both as a local and intestinal disinfectant, and is administered in the same dose as salicylic acid.

Another method of destroying the activity of the bacteria is to starve them out by substituting a new diet for that to which they are accustomed.

For this reason Vaughan recommended that in infantile diarrhœa beef-tea, rice water, or pure water should be given instead of milk for some days until the bacteria have died out. The same principle may be considered to be applied in the treatment of typhoid fever. The same requirements for antiseptics apply to the local treatment of other cavities and raw surfaces, and in consequence of the poisonous action of carbolic acid recourse has been had to mercurial salts. At the same time, a number of organic substances have been tried with some success. Iodine in combination as iodoform, when sprinkled on a raw surface, prevents the movements of leucocytes, keeps the surface dry, prevents suppuration, and encourages granulation; whilst at the same time its local anæsthetic action lessens pain. It has also a special influence on tubercle bacilli, and has been used in local tubercular processes, particularly of the larynx. Iodoform, however, is poisonous; it produces running at the nose, and gastric disturbance like iodine, and, as a member of the alcoholic series, it causes nervous symptoms like headache, loss of memory, var-

iable temper, sleeplessness, and sometimes mania alternating with coma. Fatty degeneration of the heart and other organs is usually found after death. In consequence of this poisonous action, another substance, iodol has been introduced, in which four carbon atoms with one of nitrogen form a closed ring, four atoms of iodine being attached. This has the advantage of being free from smell and less poisonous, though it is rather more irritant locally. Another compound of iodine with a member of the aromatic series, paraphenol sulphonic acid, called sozoiodol, has been recommended, forming salts with potassium or sodium, which are neither poisonous nor ill-smelling, and which may be used either in solution, ointment, or powder. Another combination has been obtained by uniting chlorine with phenol, as trichlorphenol, the salts of which, with calcium and magnesium, are powerful disinfectants, and have no irritating effects on the tissues.

For the especial experiences and advantages of these various remedies, see the indices of the *Quarterly Therapeutic Review*, July 1889.

DRY HEAT FOR CYSTITIS.

C. Hoyt, M. D., (*Trans. Med. So. Ohio*). The use of dry heat in the treatment of cystitis in the female is something new to the profession generally.

The walls of the bladder are composed of mucous lining internally and a muscular coat externally, the latter being partly covered with the peritoneum. Between these structures are interposed layers of connective tissue. Each one of these may become the seat of the morbid process. Books, therefore, speak of catarrhal, sub mucous, sub-serous, and parenchymatous cystitis according to the fancied location and extent of the inflammatory process. In practice we find these various forms of cystitis blending one with the other, so that it is often impossible to decide fully upon the exact location and extent of the inflammatory process unless it be in very recent cases of the catarrhal variety. It will thus be readily understood that the diagnosis of the exact variety of cystitis is often a matter of great difficulty. If the case is one of long standing, the whole structure of the bladder is apt to be more or less inflamed, as well as the connective tissue surrounding it. In such cases both local and constitutional measures must be used to overcome the difficulty.

The heater used is similar in size and shape to the ordinary double canula catheter, the only difference being that the former is closed at the point, instead of being open as in the case of the double catheter. It is insulated with hard rubber to within about two inches of the point, which is silver or nickel-plated. To the upper branch of the other end of the heater is attached an ordinary piece of rubber tubing four or five feet in length. The other end of the rubber tubing is connected with the vessel containing the hot water. The lower branch is supplied with a stop cock to prevent the waste water from running out too rapidly and using an unnecessary amount of water. Allow just enough of the hot water to flow through the instrument to keep heated to the required degree. To this lower branch, below the stop-cock, is attached another piece of rubber tubing to convey the water to some convenient receptacle.

Use as a supply receptacle a tin vessel holding one or two gallons, arranged on a bracket over a gas-jet or a coal-oil stove. A thermometer should be fitted to the side of the vessel, so that the water contained can have its temperature regulated to the desired degree. There should be an opening in the side of the vessel near its bottom, into which a tube or thimble chould be soldered, and allowed to extend out about half an inch, so that the rubber-tubing going to the heater can be attached to it. In case this arrangement for attaching the tubing to the vessel is not made, then the tubing can be put in the water at the top of the bucket, and made to act as a siphon. Now, when everything is in readiness, the patient should be placed upon her back on a convenient table or bed. After lubricating the heater, it should be carefully inserted into the bladder, care being taken to empty the bladder before inserting the heater, as the heat from the instrument will cause the bladder to contract and force out the contained urine.

At the beginning of the operation the water should be at a temperature of about 110° or 115° F., and should be gradually increased from time to time as the patient becomes accustomed to it. After a time the patients will bear the water at a temperature of 130° or even higher, without discomfort. It should not be used hotter than can be borne without discomfort. The duration of the applications should be about ten minutes for the first sitting, gradually increasing to a half-hour in future sittings. If used too long it causes weakness and prostration. The treatment should be repeated two or three times a week, according to the requirements of the case and the patient. Marked improvement is usually observed to follow the first treatment, as is shown by the less frequent calls to urinate, as well as diminution of the pain consequent upon that act. The pelvic congestion, weight and soreness are speedily relieved, and a better circulation is established within the walls of the bladder and pelvic organs generally.—*Arch. of Gyn.*

CONTRIBUTION TO THE STUDY OF THE INFLUENCE OF ALCOHOL ON PEPSIN.

Substances Antagonistic to Pepsin.

In a recent memoir, Dr. Henri de Nesslern reviews the current views respecting the influence of alcoholic preparations on pepsin, and especially the authoritative statements of Vulpian, based on the researches of his pupil Mourrut. It will be remembered that Vulpian condemned all the vinous or spirituous combinations of pepsin as inert and valueless while Portes took a different view, affirming that it is only concentrated alcoholic solutions that have a damaging action on pepsin.

The questions considered by Nesslern are the following:

1. Is pepsin soluble in alcohol and the aqueous solutions of alcohol?

2. Does alcohol, even when considerably diluted, materially alter the properties of pepsin?

The results obtained are summed up in the following conclusions:

1. The difference of opinion on the reciprocal action of alcohol and pepsin are due to the fact that the products employed were defective.

2. A pepsin that will stand the test should not only dissolve, but peptonize albumen and fibrine.

3. Good pepsin still preserves its digestive power in twenty per cent. alcoholic solutions.

4. Pepsin is completely altered in its properties by seventy per cent. alcoholic solutions.

5. As far as the wines and elixirs of pepsin are concerned, it is not by their alcohol that they render pepsin inactive, but probably by the tannin which they contain; and in the fabrication of such preparations, wines which contain little tannin should be chosen. For the wine of pepsin of the French Codex, Lunel wine is selected, as being most free from tannin.

According to Bardet, sugar does not impair the action of pepsin, and most of the salts are compatible with it. The presence of chloride of sodium diminishes its action while this is enhanced by the salivary and pancreatic diastases; by liquors in process of alcoholic, acetic and lactic fermentation, by saur-kraut, old cheese, etc. Lactic acid was pronounced enpeptic by Magendie, Claude Bernard, and Schiff, and recommended especially as a medicine by Handfield Jones. Hydrochloric acid, associated with pepsin, was a favorite remedial agent with Trousseau.

Among the substances antagonistic to pepsin should be mentioned the alkalies and alkaline bases, when in any considerable excess, as well as all metallic salts capable of precipitating it from its aqueous solution.—Ed. Bost. *Med. and Surg. Jour.*

NOTES OF THE TREATMENT OF MEASLES.

Drs. J. D. Smith and W. C. Dabney (*Archives of Pediatrics*, Aug,. 1889.), conclude "A Study of Measles" with the following remarks as to the treatment:

It is worthy of note that those cases did best and suffered least from general and local symptoms which were more marked in the patients in the general wards.

With respect to treatment but two or three points may be mentioned.

It was found that the cough and sore throat were greatly relieved by the frequent use of small quantities of a mixture of linseed oil and glycerine,—one part of the former to three of the latter.

Of far greater interest was the effect of antifebrine in these cases; it was always given as soon as the temperature reached a point above 103°, and in some cases it was administered when the fever was much less, in order to produce sleep or allay restlessness.

The primary effect was of course to reduce the temperature, but it had other effects of scarcely less value; it was found to quiet restlessness and promote sleep better than any other remedy which could be employed, and, although the drug was used very freely (more than two ounces were used during the epidemic), in no instance was there a single unfavorable symptom.

The itching was entirely relieved for the time being by its use, and there was produced a feeling of great comfort in all respects. The effect upon the kidneys, too, is not without interest; in every case it first caused a reduction of temperature with more or less sweating, followed usually by sleep, and then, after three or four hours, the patient would pass a large quantity of limpid urine. The suppression of urine in the case of scarlet fever was apparently relieved by the antifebrin. It is worthy of mention, also, that in the two cases in which retention of urine occurred antifebrin had not been employed.

The dose usually given was from two and one-half to three and one half grains, according to the age and weight of the patient, and it was dissolved in brandy to which a little water was then added.

It was never found uecessary to repeat the dose under six hours, and in many cases one dose a day was sufficient; and if this dose was given at bedtime it nearly always caused a quiet night's sleep.

It seemed to make no difference in the action of the drug whether it was given on an empty stomach or after taking food.

Edwards (*Medical Record*, March 3, 1888) has found antipyrin to reduce the temperature and relieve the headache and itching in measles just as antifebrin was found to do in the epidemic which is here recorded.—*Col. and Clin. Rec.*

THE PROGNOSIS OF ALBUMINURIA.

Dr. Johnson, after discussing at length the opinion of various writers upon the subject of the prognosis of albuminuria, draws the following conclusions:

1. The presence of albumin in the urine, though small in amount and occasionally intermittent, is always pathological.

2. The practice of testing the urine in all cases of ailments, even in most trivial—the importance of which I have for many years past insisted upon—has led to the detection of albuminuria in many youths and adolescents, who are especially liable to be exposed to the commonest of its exciting causes, namely, cold and wet and over-fatigue, and who have not lived long enough for the ultimate evil results of a neglected albuminuria to have become developed.

3. The albuminuria, whether intermittent or persistent, of persons apparently in good health has no such special features as to require it to be designated by

such misleading terms as "physiological," "functional," "cyclical," and "the albuminuria of adolescents." The last term is especially inappropriate, since the condition is of the most common occurrence in both sexes, and at all periods of life, from childhood to extreme old age.

4. In almost every instance these cases of albuminuria may, by a careful inquiry, be traced back to some recognized exciting cause.

5. Nearly all cases of acute nephritis pass through the stage of intermittent albuminuria in their progress toward convalescence; and, on the other hand, the majority of cases of intermittent albuminuria may be traced back to a more or less remote attack of acute nephritis.

6. While on the other hand, intermittent albuminuria —even though it may have existed for years—may be looked upon as a curable condition if only its exciting causes can be ascertained, avoided and counteracted by suitable dietetic, medicinal and hygienic means; on the other hand, the neglect of such means may convert an intermittent into a persistent albuminuria; and a persistent albuminuria, although for many years it may be unattended by symptoms of disordered health, ultimately results in a fatal degeneration of the kidneys.

7. Since it is notorious that albumin, even to a very large amount, may exist in the urine of persons who are in apparently perfect health, it is obvious that the urine of every patient, no matter how apparently trivial his ailment, and the urine of every applicant for life insurance, no matter how robust his appearance, should be tested for albumin.

8. For many years past the fact that albumin may be abundantly present at one period of the twenty-four hours, and entirely absent at another has been publicly demonstrated, and ought to be generally known. It is, therefore, necessary to test the urine, not only after rest in bed and before breakfast, but also after food and exercise.—*Brit. Med. Jour.*, Aug. 24, 1889.

CLINICAL SIGNIFICANCE OF COLORLESS STOOLS.

At a recent meeting of the Royal Medical and Chirurgical Society a paper by Dr. T. J. Walker was read by Dr. Andrew Clark, as to the "Clinical Significance of Colorless, or Clay-colored Stools Unaccompanied by Jaundice, their Connection with Disease of the Pancreas, and on the Part played by the Pancreas in Eliminating Bile from the Intestines." (*Lancet*, March 30, 1889.) After referring to the accepted views of the significance of clay-colored stools, the author gave particulars of two cases in which, during life, a persistent symptom was the absence of color in the fæces, and in which the diagnosis made of obstruction of the pancreatic duct, with a healthy condition of the bile-duct, was confirmed by the necropsy. From these cases he concluded: 1. That the formation of hydrobilirubin, the coloring matter of the fæces, depended on the mutual reaction of the bile and pancreatic fluid, under the influences met with in the intestinal tract. 2. That in disease a deficiency of pancreatic fluid would, equally with a deficiency of bile, cause the pathological condition of colorless or clay-colored stools. 3. That since, according to the most recent physiological researches, that portion only of the colored constituents of the bile which have been converted into hydrobilirubin was excreted in the fæces, while the unchanged bilirubin, bilifuscin and biliverdin were absorbed, it followed that if hydrobilirubin could not be produced without the aid of the pancreas, that organ must have an important role in regulating what proportion of bile entering the intestines should be absorbed and what thrown off in the fæces. Dr. Walker then pointed out that these conclusions received confirmation from the records of other published cases, that Claude Bernard recognized that the pancreas had a part in causing the color of the fæces, and that the state in which the bile pigments were found in the meconium of the fœtus, while the pancreatic function was in abeyance, also accorded with these conclusions. He further pointed out that the fact of the pancreas influencing the excretion of the bile would, if accepted, reconcile the discrepancy between the clinical observation that certain drugs produced copious bilious stools, and the physiological observation that these drugs had little or no influence on the secretion of bile by the liver; and that the same fact would explain those hitherto inexplicable cases in which, with no evidence of arrest of the bile-secreting functions of the liver, or of obstruction of its ducts, the symptom of white or clay-colored stools was persistently present. In conclusion, Dr. Walker indicated the practical importance of the views he had endeavored to establish in the treatment and diagnosis of pancreatic disease and of all forms of bilious disorder.—*Can. Lancet.*

FRACTURES OF THE NECK OF THE FEMUR.

BY N. SENN, M.D., PH.D., MILWAUKEE, WIS.

Conclusions of a paper in Journal of the American Medical Association, August 3, 1889.

1. From a scientific, prognostic and practical standpoint it is necessary to make a distinction between intra and extra-capsular fractures of the neck of the femur.

2. An impacted fracture of the neck of the femur will unite by bony union, provided the impaction is not disturbed and is maintained by appropriate treatment for a sufficient length of time for the fragments to become united by callus.

3. Impacted fractures of the neck of the femur should be treated by a fixation dressing consisting of a plaster-of-Paris case, including the fractured limb, the pelvis and the opposite limb as far as the knee, in which a splint should be incorporated, by which lateral pressure

can be secured in the direction of the axis of the broken femoral neck.

4. Unimpacted fractures of the neck of the femur, both intra and extra-capsular, should be treated by immediate reduction and permanent fixation, so as to place the fragments in the same favorable condition during the process of repair as in impacted fractures.

5. Reduction is effected most readily by auto extension and traction upon the fractured limb with the patient in the erect position, and resting his weight upon the sound limb.

6. The fixation dressing should not be removed and the lateral pressure should not be discontinued for from ten to twelve weeks, the shortest space of time required for bony union to take place.

7. Patients who have sustained a fracture of the neck of the femur should not be allowed to use the fractured limb earlier than four to six months after the accident, for fear of establishing a pseudo-arthrosis at the seat of fracture.

8. The functional result is greatly improved by passive motion, massage, and the use of the faradic current.

Removal of Moles by Electricity.—If the growth is the elevated, warty mole, its removal by electricity is admirable. The brown pigment mole may also be destroyed in this way, but it is not quite as clean cut an operation. With the warty mole, I inject into it a few drops of four or six per cent cocaine, and as soon as it is benumbed, I transfix the growth at the base, exactly on the level of the adjacent skin the needle having previously been connected to the negative pole of a galvanic battery. I use about eight milliamperes current, equivalent to about twenty cells of a thirty-six cell battery if in good condition. One could use from twelve to sixteen or even twenty cells. The positive sponge electrode may be held by the patient in the hand, unless the current would pass through the eye, when a small sponge electrode must be pressed upon the the face at some point that would avoid this objection.

Very soon after the current is completed, bubbles of gas pass out along the points of entrance and exit of the needle, and the mass becomes blanched. Hold the needle there half a minute to a minute. Transfix again at right angles, taking care to interrupt the current by taking off the sponge electrode before the needle is withdrawn, and also taking care to introduce the needle again before completing the current. If the mass is very large or is very fibrous, transfix a half dozen times at different points, but always on the exact level of the skin adjacent. In this way a layer of dead tissue is formed by the electrolytic action of the current at the base of the mole, and on the level of the skin. The main mass dries down, and dies from lack of nourishment, and in five to eight days drops off, leaving a smooth pink spot, which, in a month or so, will fade away almost entirely. The mole dries down into a dark crust before dropping off.—W. F. Hoyt, M. D., in *Columbus Med. Jour.*

OUR MEAT AND DRINK.

So it has come to this, that men
Must dine no more on flesh again,
The chances being nine to ten—
Tuberculosis.
The thought's enough to there and then
Cause cyanosis!

I wonder what is safe to eat!
Swine seem as bad as butcher's meat,
For porcine flesh they say's the seat
Of trichinosis,
And even tea, that household treat,
Brings on neurosis.

They are all tabooed—well, let them go!
What though it bring my system low,
And fond friends cry in tones of woe,
"He's got chlorosis!"
Impoverished blood is less a foe
Than scrofulosis.

Farewell, my modest evening tea!
Microbic flesh depart from me!
Seductive beer it may not be!
Who wants cirrhosis.
E'en sugar's not suspicions free,
There's teeth necrosis.

No more the cherished hope I'll hug
That all this cry is mere humbug;
Henceforth I'll feed on "flesh that's dug."
If plants have "oses,"
I'll swill some antiseptic drug
In treble doses.

—E. P. W. Glasgow, in *Hosp. Gazette.*

Irrigation of the Puerperal Uterus.—Dr. Haynes (*American Journal of Obstetrics*) concludes a discussion of this subject thus: 1. Where intra-uterine irrigation is used in the absence of sepsis, use no sublimate, but plain hot water, or salt and water. 2. If the urine is albuminous and scanty, use no mercury. 3. If the urine is slightly albuminous and copious, or if the patient is profoundly anæmic, do not use more than a pint of a solution of 1:8,000. 4. Always use tartaric acid and sublimate tablets or powders; dissolve thoroughly in a small quantity of water and mix carefully with a definite quantity of hot water in a pitcher, from which pour into the irrigator. 5. Always use fountain syringe, and for the uterus a double tube, so as to insure the return of the solution. If for any reason the fluid fails to run out as fast as it flows in (if not through the reflex tube, by way of the channels at its sides), shut off the flow. The irrigator should not be raised more than three feet. 6. Precede by copious irrigation with hot water to wash out blood, etc., which may form with sublimate adhesive albuminous compounds, which may in time be absorbed. Follow by a quart or two of hot water to insure the evacuation of all the sublimate solution. 7. For the uterus use a solution not stronger than 1:8,000, and not more than a quart daily. 8. For the vagina use a solution not stronger than 1:4,000, and not more than a quart twice daily. Irrigation used in the above way is, we believe, a practice almost

devoid of danger. We have made more than 175 irrigations with the double tube and fountain syringe, with no untoward results except in two cases an unimportant rise of temperature, and in one a severe but harmless chill, and even these slight accidents we feel certain might have been avoided by greater care. Yet irrigation of the puerperal uterus will always be a procedure requiring great care and judgment, and some skill. Enough has been said to make it evident that our opinion coincides with that of Credé and Fehling, that both vaginal and uterine irrigation are attended with undoubted dangers, and should never be employed in the puerperal state unless to meet definite indications.—*Med. Rec.*

THE TREATMENT OF PLACENTA PRÆVIA.—Dr. Braxton Hicks recommends (*Lancet*, Aug. 7, 1889,) the following method:

1. After the diagnosis of placenta prævia is made, proceed as early as possible to terminate the pregnancy.

2. When once we have commenced to act, we are to remain by our patient.

3. If the os is freely expanded and the placenta marginal, rupture the membranes, and wait to see if the head is soon pushed by the pains into the os.

4. If there be any slowness or hesitation in this respect, employ forceps or version.

5. If the os is small and the placenta more or less over it, carefully detach the placenta from around the os, and if no further bleeding occurs we may wait an hour or two; but should the os not expand, and if dilating bags are at hand, the os may be dilated. If it appears that the forceps can be admitted easily, they may be used; but if not, version by the combined internal and external method should be employed; and the os plugged by the leg or breech of the fœtus; after this is done the case may be left to nature, with gentle assistance, as in footling and breech cases.

6. If the os is small, and if we have neither forceps nor dilating bags, then combined version should be resorted to, leaving the rest to nature, gently assisted.

7. If during any of the above manœuvres sharp bleeding should come on, it is best to turn by the combined method in order to plug by breech.

8. When the fœtus is dead, or labor occurs before the end of the seventh month, version by the combined method, no force following, is the best plan.

To these Dr. Braxton Hicks added, if we employ a routine method in most cases, it will be found that version by the combined method, no force following, gives a result as good as, if not better than any. As to after-treatment, act on modern principles. Should oozing occur after expulsion of the placenta, swab the lower uterus daily with some antiseptic solution and particularly if irrigation cannot be done, insert iodoform pessaries in the vagina. This is especially useful if the outlet of the uterus is blocked by adherent clots.

LINES OF A SPECIALTY SHARPLY DRAWN.—The *London Medical Recorder*, among some other curious things relating to the medical profession, tells the following:

"In China, it appears, the distinction between physicians and surgeons is more sharply defined than with us, and every man is expected to stick to his own branch of the profession. A rich merchant was struck by an arrow which remained fixed in the wound. The principal surgeon of the place was sent for, and, after insisting on pocketing his fee in advance, cut off the prejecting end of the arrow, leaving the point buried in the patient's body. On being ask to extract it, he said that medical etiquette would not allow him to trespass on a brother practitioner's province; the arrow being inside the body, the case was clearly one for a physician!"—*Boston Med. and Surg. Jour.*

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE U. S. MARINE HOSPITAL SERVICE.

ENDING OCT. 5, 1889.

Fessenden, C.S.D., Surgeon, granted leave of absence for thirty days, Oct. 3. 188 9

Wyman, Walter, Surgeon, granted leave of absence for thirty days, Sept. 3 and 21, 1889.

Sawtelle, H. W., Surgeon, granted leave of absence for seven days, Sept. 26, 1889.

Austin, H. W., Surgeon, granted leave of absence for thirty days, Sept. 9, 1889.

Gassaway, J. M., Surgeon, when relieved at New Orleans, La., to rejoin station at Cairo, Ill., Sept. 30, 1889.

Galesborough, C. B., Surgeon, leave of absence extended thirty days on surgeon's certificate of disability Sept. 16, 1889.

Armstrong, S. T., Passed Assistant Surgeon, relieved from duty at New York, ordered to command of Service at Cleveland, Ohio, Sept. 17, 1889.

Ames, R. P. M., Passed Assistant Surgeon, assigned to duty at New Orleans, La., upon expiration of leave of absence, Sept. 30, 1889.

White, J. H., Passed Assistant Surgeon, leave of absence extended thirty days, on surgeon's certificate of disability, Sept. 21, 1889.

Norman, Fenton, Assistant Surgeon, granted leave of absence for thirty days, to take effect when relieved, Oct. 4, 1889.

Cuttus, W. J., Assistant Surgeon, ordered to Portland, Maine, for temporary duty, Sept. 26, 1889; granted leave of absence for twenty-six days, to take effect when relieved, Oct. 3, 1889.

Kinyoun, J. J., Assistant Surgeon, granted leave of absence for thirty days, Sept. 21, 1889.

ORIGINAL ARTICLES.

RUPTURE OF AN OVARIAN CYST.

BY H. O. PANTZER, M. D.

Read Before the Mississippi Valley Medical Association at Evansville, Ind., Sept. 10, 1889.

The success of modern surgery, aggressive and conservative,its steady and rapid advance ever since the advent of anæthetics and Listerism, as compared with the relative standstill of many centuries immediately preceding this era, is astonishing.

To those not immediately interested, and hence not intimately acquainted with the course of this development especially of abdomonial surgery, the revelations and evolutions, though growing naturally one out of the other, so quickly follow one another as to be perplexing, and considered individually, they have often evoked unfit criticism and censure.

Close study, however, will show the virtue and strength of modern notions and practice. The old rules and indications for operating are thrown aside, and the recently formulated are daily undergoing reconstruction and addition.

What wonder then, in these days of unsettled doubts and wavering indications that we often make disastrous pauses in our work, or even in our decisions, especially in regard to these contingencies where specialistic treatises differ, are indefinite, or silent!

It has often been stated that the unlucky cases contain more of admonition and instruction than the fortunate ones.

This involves that they should be conscientiously reported. From such convictions the writer is led to narrate the following history. Under the impression of antiquated teaching, and by the lack of a definite direction in all of the special treatises consulted, he was led to postpone, and thus forfeit for his patient, the benefit of an operation, which by the accomplishments of modern surgery, promised almost to a certainty complete cure without dangerous exposure:

Mrs. A. L., æt. 51 years, German, mother of eight children, the youngest æt. 10 years, began menstruating at the age of 16 years. She caught cold at once and missed her periods one year. They were re-established by medication, and then contined regular, excepting during pregnancy and lactation, until menopause, at the age of 49 years.

I had treated the patient in two short malarial attacks, the last time in May, 1888. Otherwise she had always enjoyed good health, excepting occasional attacks of sick headache.

October 23, 1888, she came to my office, saying she had another bilious attack. This was maintained by complaint of sharp pain in region of liver and spleen, aggravated on deep breathing; frontal headache, constipation, anorexia and lassitude. Percussion over region of liver in the upright position elicited dullness and tenderness extending two inches below the thorax. A bulging forward of the lower abdomen was noted, but questions pertaining to pelvic disease elicited nothing affirmative. Patient attributed this enlargement to the obesity which follows menopause. Examination of pelvic organs was postponed till the next day, when I was to see her at her home.

October 24, the patient said she was better from her malarial trouble, but that the street-car ride home, the previous day, had been very distressing, and had given pain in her lower abdomen, which prevented her getting up that morning. Slight nausea, no marked temperature, pulse about 100°. Patient in the recumbent position, inspection showed abdomen large, prominent in lower region, slightly more on left side. Thick panniculus adiposus. Palpation revealed a fluctuating, movable tumor about the size of an adult head, attached below, and over which the abdominal parietes were freely movable. Percussion elicited ring of tympanitic resonance. Tenderness over the abdomen general, greatest over left inguinal region. Vaginal touch provedthe womb to be freely movable,normal in size,displaced to the right. Cyst could be felt to arise from left side by a long pedicle. Right ovary palpable. Left parametrium tender and swelled. Diagnosis: ovarian cyst with pedicle twisted. Patient was informed of this, and that only an operation could give relief. Hot vaginal irrigation, hot stupes over abdomen, absolute rest in bed and opium internally were ordered.

October 25, patient was easier. The diagnosis of tumor, which had increased in size, was confirmed. Patient consented to operation, and counsel was proposed and accepted. As the occasion for council was not urgent, the convenience of counselor was decisive in fixing on the third day hence.

October 26, tumor increased in size and perhaps more tender to touch, otherwise condition unchanged.

October 27, patient reported herself much better. Inspection showed abdomen flat, like in ascites, and no tumor, but free fluid within abdomen could be felt. Rupture of the cyst had occurred without the knowledge of and with apparent relief to the patient. Pain on pressure over left inguinal region, fullness and dullness. Temperature 99°, pulse 90. Viginal exploration confirmed presence of soft, doughy swelling in left side and cul-de-sac, as though of blood. One-tenth grain of elaterium every two hours until hypercatharsis was attained, was ordered.

October 28, patient felt much better had purged freely and vomited some; abdomen free of fluids. Swelling in the left side remaining. Patient took and relished food.

October 30, patient quite well. Pain in left inguinal region only on deep pressure.

November 4, patient was up andarouud doing hand. sewing and directing her household.

November 13, patient said she was cured.

Bimanual examination showed tumefaction to be oblong 1½ inches thick, stretching from the womb forward. Tender only on deep pressure. No remnants of cyst could be detected. Patient was told that the rupture of cyst might end it, though a return was possible and should be apprehended. She was to report for examination from time to time.

December 10, examination showed swelling in side less in size and not tender. No evidence of cyst. Patient in good health and light spirits.

March 20. Prescribed for a malarial attack. No examination was made as patient assured me there was no return of swelling, which remark she accompanied by pressing deeply both hands into her lower abdomen. May 30, seven months after recognition of cyst and two months after my last visit, I was summoned. Found patient out of bed, but in misery with pain in hypogastric region and feeling very faint; abdomen suspiciously large. She stated that the abdomen had often swelled lately, but would always go down after free movement of gases. This time swelling came up several days ago, was painful, and would not yield to ordinary means. She thought there could be no tumor. Examination in prone position revealed a cystic tumor reaching above umbilicus, of smooth, even surface, abdomen tender throughout, markedly so over upper part of cyst. Liver swelled and tender. Free fluid in abdomen not perceptible,moderate tympanites.She remarked that the abdomen had swelled much in the last two days. Temp. 98°, pulse rapid and weak, 120 per minute. Diagnosis, return of cyst and twisted pedicle, biliousness, hæmorrhage into the tumor. Rest in bed, opium internally, hot stupes externally, quinine for malarial complication.

May 31. Patient was seen in consultation by Dr. Eastman, who concurred in diagnosis. Operation was proposed to which patient willingly assented. The question of a private hospital came up, but was regarded unfavorably, on account of the transport of the patient in her precarious condition. As Dr. Eastman held that her strength would justify this delay, June 3 was fixed for the operation, which gave ample time to prepare a room at her home. Patient was evidently larger than the day before, manifestly from swelling of the cyst, as there was only moderate tympanites, and no effusion. Temperature about normal, pulse small and rapid, 130 per minute, respiration embarrassed, frequent and shallow. Patient this morning had had an attack of dyspnœa and faintness, and complained of pain over her heart. Excessive vomiting. Great tenderness over upper segment of tumor. Lips pale, expression of face anxious. Tapping for temporary relief was objected to by counsel, as not urgently necessary and because impairing chances of operation. Chips of ice, sips of hot fluids, bismuth spirits of ammonia, quinine.

June 1. Patient in better spirits, stomach quieted and retaining milk and beer in small quantities. No perceptible changes otherwise.

June 2. Was summoned in haste early in the day. Patient had had another attack of dyspnœa, accompanied with vertigo, blindness and cold sweats. She had rallied before I got to the house. Pulse feeble, irregular, 150 to the minute. Great pain in region of heart. Skin cool and clammy. Stimulants were directed to be given. I left to meet Dr. Eastman and operate immediately. Before effecting a meeting with him, I was sent for again, and when I reached the house I found the patient dead. She had expired in an attack similar to those described, bloody emesis occurring at the time.

Autopsy was held in the afternoon in the presence of Drs. Eastman, Bell, Patterson and Crose.

Emaciated corpse, skin pale and shriveled. Abdomen greatly distended. Fluctuating dullness from pubes to enciform cartilage. Tympanitic resonance latterly, no evidence of ascites.

Incision into linea alba revealed thin paniculus adiposus, and exposed a dark-purple cyst, traversed by numerous distended vessels. A small quantity of clear serous fluid escaped from abdominal cavity. In retracting the margins of incision, the fingers perforated the cyst and dark serosanguinolent contents escaped, nearly filling two ordinary water buckets. No adhesions anywhere. The cyst-wall was of varying thickness, dense and tough throughout, excepting in its upper part where it had been perforated. It was spotted with hæmorrhagic patches, some as large as a silver dollar, partly of old date, as shown by partial organization. Cyst grew from left ovary and had a pedicle 1½ inches wide and 3 inches long, which was twisted on itself 2½ turns on the outside of the cyst, closely adherent to it and running upwards from the pedicle, is an oblong swelling about 1¼ inches wide and 3½ inches long, which being cut into, showed itself composed of organized blood, and may probably be regarded, as the remnant of the swelling felt after the rupture of the cyst, last October. The corresponding internal surface of the cyst-wall was smooth and even, and suggested no connection with this clot.

Diagnosis.—Unilocular ovarian cyst, growing from left ovary, and twisted on its pedicle, being in a state of imminent gangrene from strangulation and hyperdistension of its walls by serous and hæmorrhagic contents. Death from hæmorrhage.

Review.

The hæmorrhagic contents of the cyst maintain the notion, held intra vitam, that the sudden increase in size was owing each time to extravasation of blood into the cyst. Smith speaks of hæmorrhage causing faintness, and Winckel quotes Parry as having observed that hæmorrhage into a cyst swelled its diameter one and one-half inches within a few hours. Without measurements having been taken, I think I may say that the swelling increased proportionately more quickly than this, during the last days of the patient.

Effusion from venostasis is another cause active in cystic enlargement, after twisting of the pedicle. Undoubtedly these causes were mainly active in producing

hyperdistension of the cyst, which in turn attenuated its wall and, in the case of the first accumulation, caused rupture. Remarkable in this connection, is that this event created so little peritoneal irritation, if we consider, that the strangulation and over distension of the cyst had probably led to gangrene. This patient had never had any pelvic or peritoneal inflammation. May this fact be adduced to explain the absence of graver inflammatory symptoms? Is it not warrantable to suppose that morbified elements, such as clinical experience would teach us are always remnant from specific inflammation of the abdominal viscera, were wanting in this and similar cases? This view, if accepted, would help us locate the sources of danger in those cases of rupture, where violent peritoneal inflammation and shock attend this advent. Previous peritoneal contamination—be it extra-cystic and fanned and fed into a new formidable outbreak by this peritoneal inundation, or be it intra cystic, being from its location at an early date in the existence of the cyst included therein and now emptied on the fertile peritoneal soil—be it as it may, previous peritoneal contamination, or its want, is a more rational explanation for the presence, respectively absence, of violent symptoms, than the muscular death of the cyst, which in the light of clinical experiences in analogous states (*e. g.*, the innocuous dead fœtus in a uterus presumably free from septic infection, etc.)—must be regarded quite innocuous. Low grades of fever, often denominated septicæmia from gangrene, observed in the course of the strangulated pedicle of a cyst, the little virulence of which would at once preclude septic infection could thus hardly be considered as owing to gangrene. It seems far more warrantable to attribute this to the acute anæmia following profuse hæmorrhage, and the impaired digestion and limited ingestion of food invariably attending such a state. This mal-nutrition of the body must necessarily involve destructive chemical changes in the cell-life of the organism adequate to affect its temperature.

This view of things has its practical bearing on the prognosis of such cases. Symptoms of excessive hæmorrhage should admonish us to operate at once, and to be less hopeful about results. The successful operation, *i. e*,, rapidity, safety and antisepsis attained in the operation, means nothing, unless there be a remnant in the body, a vitality adequate to carry on life.

Thus, to recur to the case in question, an operation performed two or three days before death, would have promised little toward a cure. Depressed vitality from acute anæmia, not gangrene of the cyst, clouds our hopes, and decides the end. A careful study with regard to these views of the clinical records of those cases of ovarian cyst where the history points to hæmorrhage, does incline me to believe that what is denominated subacute or chronic septicæmia from gangrene of the cyst, may equally well be attributed anæmia from hæmorrhage.

A case of vaginal hysterectomy in my own practice recently has again directed my thoughts in this direction. The patient, having cancer of the womb, had flooded excessively and was quite exsanguinated, when the operation was performed, occasioning another great loss of blood. There was no fever, nor any symptom indicative of a bad healing, or septicæmia,excepting great general—markedly cardiac—weakness, and cardiac pain. This state lasted sixteen days, when fever and great general depression set in, to continue increasingly until death, three days afterward. A most careful post-mortem research, made with the aid of Drs. Eastman and Bell, showed the peritoneal cavity free from any symptoms of septic or inflammatory processes, in fact, the peritoneal cavity had effectually closed and healed with the nicety of theoretical perfection. All research for a palpable source of the fever was in vain, and the explanation of anæmic fever seemed the most rational. It is a remarkable coincidence that malarial congestion of the liver and spleen attended each time the serious developments in the cyst. Can it be that the engorged portal circulation was conducive to the hæmorrhages into the cyst and even to the strangulation of the pedicle? Presumably the ruptured cyst continued open, and its secretion discharged into the abdominal cavity, long before its final closure and cystic re-accumulation. On this notion alone can be explained its positive obscurity up to December 10, and its probable non-cystic reformation until long after that date. It is interesting to note that no adhesions had formed, or, at least. had not maintained themselves from this period.

Elaterium was given to rapidly remove the extravasated fluids, and thus reduce peritoneal irritation and systemic absorption; also to determine early, if malignancy were present to prompt immediate operative procedure. Harsh as the remedy may seem it proved efficient without developing unfavorable symptoms.

In the light of the autoptical appearances it would seem that where we may assume aseptic contents to exist—though gangrene be imminent—that tapping would be commendable as a means to obviate further distension and hæmorrhage into the cyst, where the operation for removal from some valid reason is not at once feasible.

Misleading and fatal in its bearings on this case was the teaching that these cysts can become absolete after their rupture. While attending the clinics of Prof. Braun at Vienna, in the spring of 1886, the writer was present when a young female was brought before the class for ovariotomy. An ovarian cyst had been recognized and this diagnosis was confirmed by Prof. Braun, his assistants and several others, including the writer, a few minutes before the transport of the patient, in chloroform narcosis, to the class-room. When the abdomen was uncovered no cyst was found, but a fluctuating dulness pointed to its rupture. The patient was carried by the clinic-servant by one arm under her shoulder and the other under her knees, thus doubling the body on itself and compressing the abdominal contents with results as stated. Prof. Braun took occasion to remark that this patient would recover within eight

days and without unfavorable symptoms. And presumably there would be no return of the cyst. He had had such cases before, one of which had now passed fourteen years, without a symptom of a return.

The literature by the older writers is profuse in records of cases coming to their cure by spontaneous rupture, and of methods devised to artificially rupture or drain ovarian cysts as a means of making them absolute. Thus Spencer Wells has quite recently advised for draining, to excise a piece of cyst-wall, 3 cm. in size, tying the blood-vessels, this operative procedure to be restricted, however, to unilocular cysts of thin wall and clear serous contents.

Recent observations, however, leave doubtful the end attained. Thomas says: "The spontaneous cure of ovarian cyst is dubious. Old writers firmly adhere to this view but modern observations make this statement incredible, and errors in diagnosis, or perhaps the want of observations late in the life of such patients, has led to erroneous conclusions."

Skene (T. ed. p. 486) says: "It has also been claimed that the cyst may disappear (after rupture) and the patient recover. When this spontaneous recovery occurs after the bursting of a cyst there is always room for doubt about its being an ovarian cyst. For the present it must remain an open question whether ovarian cysts ever disappear in this way."

Certainty on this question would appear to be of great importance in determining the line of action to be pursued. However, this apparent importance shrinks in magnitude, if we consider that the disastrous results of practices, aiming to obliterate ovarian cysts by evacuating their contents, has already restricted their application to a limited class of cases. Thus cysts of obnoxious contents, which latter on entering the abdominal cavity occasion fatal septicæmia and peritonitis or metastatic growths, are excluded from this plan of operating. On the other hand, if, in the light of modern research, we consider the doubtful efficacy of all such curative attempts, and if, in the justifiable pride of modern surgical achievements, we quote the almost universal success of ovariotomy per laparotomiam, should, yes can, we be long in formulating our rule of action? From the experience in my case it would appear, indeed, very imprudent to ever again leave it to a patient to note and report a return of her affection, or even less, to trust to these easily beguiled women to present themselves from time to time for examination. Although my patient had been advised of the dire consequences of a retarded recognition of a return of the cyst, yet, in the biased state of her mind—she would accept only what she cared to believe—she failed to timely signal her danger. The lesson of this history is that all cases of rupture of ovarian cysts, alike, should be treated by laparotomy and exsection of the cyst-wall. The fact that there are present at such a time no symptoms peremptorily demanding it, makes this rule no less valid.

Although this point, from current surgical practices in gynæcology, would seem to many self-evident, requiring no special expression, yet my own faulty decision and its disastrous consequences, based, as it was, on the indefinite teaching of all treatises, seems to justify the demand for its expression in as many words, to prevent further erring.

Such guidance as the text-books of to-day give, make it too inviting to "wait and see." I pray, let there be no more of such!

THE NEED OF NOURISHMENT IN DIPHTHERIA.

BY J. A. DE ARMOND, M.D., DAVENPORT, IOWA.

In view of the fact that many cases of this serious disease die from sheer exhaustion and not asphyxia, it seems passing strange that more attention is not given to the preservation of the strength and less to the cure of the disease. Especially would it seem more natural since no form of treatment seems to influence in a uniformly favorable manner all cases of the disease.

Very few cases of diphtheria are met with in which there is not anorexia. There is sickness at the stomach, most generally caused by the presence of the membrane in the pharynx. This foreign body acts as a constant source of irritation and the unsuccessful efforts to dislodge it by hawking keeps the stomach in a condition of irritability almost constantly until weakness prompts a disinclination to do anything that will make the system more exhausted.

Diphtheria is admitted to be a disease in which the powers of life are attackd. The blood is changed in character and quality. Our remedies are all given with a view to correct this blood change, but at the same time there is loss of appetite and nausea, and blood, good and rich, is not being made in such quantity as to keep up the needs of the system. Blood comes from food. It is a great mistake to suppose that the little iron that can be given will affect in any degree the fabrication of blood. Blood must come from food, the food must be suited to the weakened powers of digestion and assimilation, and this food must be given in such quantities as the needs of the system demand, without any regard to the condition of affairs produced by the throat membrane. The demands of the system for food are to be counterbalanced in sickness, albeit personal choice is all we need to go by in health.

It then can be safely said that, as diphtheria is a febrile disease, the epitaph of a pioneer in therapeutics holds good in this case—"feed fevers." Since the recognition of the wisdom of the course is admitted, the membrane is removed by solvents, not destructives; and I venture the assertion that no part of the treatment does a child more good, secures more comfort of body and mind, and makes digestion of food more certain than the successful application of membrane solvents to the throat. The fact that the membrane reforms with great rapidity and regularity rules out entirely the application of any substance which will irritate the in-

flamed and swollen parts. They will, indeed, be fortunate who find any application which will meet the expectations and fulfil all the demands any better than the peroxide of hydrogen. Atomizers and powder blowers must always, sooner or later, fail to meet the exigencies of the hour.

Since the sickness at the stomach is in a large measure due to the irritation and encroachment of the membrane in the throat it clearly follows that when it is removed one step is taken toward correcting that antagonism to the successful conduct of the case. In the feverish, debilitated condition of the system, and the swollen and painful condition of the throat a general repugnance for all liquids and solids is had. But the demands of assaulted nature are for strength, and strength must come and can come. How?

Feed the patient. He is sick at the stomach and won't eat? Dissolve the membrane two to four times a day and he won't be so sick. He does not want to eat? Then give him liquid food, and milk easily stands at the head of the list. But he won't drink it? Then direct powders of pepsin to be given in two to four or six tablespoonfuls of milk every half hour. Alternate this with your internal medicament and you have a treatment that keeps step with good judgment, and it is strictly in accord with all that is known of the therapeutics of the disease. There is no cure for the disease. It is a self limited disease, and being that, you cannot fail in preserving the strength of the patient. It is much more rational to help the system from the start than to jump in and fight the disease as an entity, striking right and left, hitting friend and foe alike, only to find in the end that the battle was all too large for the small battle-ground to stand.

Of course milk, and by milk I mean the very best of milk, and the more cream the better, if not too hard to digest, will become very tiresome as a regular diet. It can be varied by giving beef broth, malted milk and any of the prepared foods whose value has met the demands of investigation. Food may be given cold or warm, as best pleases the patient. Many times the allowance will be lost by emesis, but the same thing will occur if simple water is swallowed. I am very sure that by simply directing a powder of pepsin with the nourishment the attendants will not be so likely to listen to the pleadings of the patient as when the food is given alone. It may be said that by giving nourishment so frequently you interfere with the giving of needed medicine. I know of no drug that is likely to be given that will in any way interfere with this system of nourishing the patient. The various forms of iron might, but if it comes to a question of supremacy between tincture of iron and nourishment, you will have no reason to regret the rejection of iron. Indeed there can be no question that in order that enough iron to be of any avail is given, providing it is of any avail—a matter I seriously question—the stomach must be kept in a state of great irritability continuously.

After all, nothing has been found to equal good food in the fabrication of good blood. In diphtheria surely the blood suffers soonest. I am well satisfied that if nourishment were given with the same free hand that many drugs of doubtful utility are handed out there would not be so urgent need of battling a desperate foe at the end of the fight with stimulants. After all, stimulants are only valuable because they help tide over a bad spot.

When you come to enumerate the things you can do in diphtheria you find the number is not large. Control fever, dissolve the membrane, keep the nostrils clean and feed the patient. These you can do. Don't neglect their accomplishment in the questionable task of curing a disease which, after all, is only strong in weakness.

REPORT ON PROGRESS.

DISEASES OF THE NERVOUS SYSTEM.

BY FRANK R. FRY, A.M., M.D., ST. LOUIS, MO.

Ferrier on Cerebral Localization in its Practical Relations.

Since the appearance of the last edition of his work on cerebral localization, Ferrier has been rather roughly handled from many quarters. Hence anything recent from his pen will be read with interest. The current number of *Brain* contains a paper recently written by him with the above title. We are somewhat disappointed in not finding in the article a more thorough defence of certain points of his position against antagonistic opinions of some of his critics whom he has on former occasions contended with in a very interesting and instructive manner. In this paper such does not seem to have been his object but simply a review of the work by which this department of medical science has reached its present status. The paper contains nothing really new, but it is valuable, if for no other reason, because it contains the recent thoughts of Ferrier, one of the foremost investigators of this important subject, which he here discusses by undertaking to answer the three questions stated below. In this short review we may give little more than just the conclusions he arrives at, referring those who would like to follow the arguments by which he does so, to the article before us (*Brain*, July, 1889, just recently out):

1. Is our knowledge of the functions of the human brain and the localization of cerebral disease sufficiently advanced to enable us to determine, with fair measure of accuracy, the locality and nature of disease affecting the cerebral hemisphere?

2. May surgical operations be undertaken on the brain and its coverings with as great safety as any of the major operations of surgery?

3. What diseases and conditions may be considered as justifying or demanding surgical interference, with a view to their removal or amelioration?

The region, lesions of which are perhaps the most common, and the most easily determined, is the Rolandic zone or motor area. One of the most significant indications of cortical disease in this region is the occurrence of unilateral spasms,—appropriately called Jacksonian epilepsy—limited to the leg, arm or face; or if not altogether limited, commencing always or nearly always in the same part and invading other muscular groups in a certain definite order.

If the spasms begin in the face, they next attack the arm, and then the leg. If they begin in leg, they attack the arm next and the face last. The attacks are not necessarily accompanied by loss of consciousness, thogh this not unfrequently happens when the spasms have become general and pass also to the opposite side. A mere irritative lesion does not necessarily imply demonstrable organic disease, and the starting point of the irritation may be elsewhere than the part discharged. But if, following these limited spasms, paralysis of motion should occur in the parts formerly convulsed, *i. e.*, if the monospasm give place to a monoplegia, and still more so if a succession of monoplegiæ should result in a general hemiplegia, then we may with certainty diagnose organic disease of the Rolandic zone of the opposite cerebral hemisphere. If the leg is especially affected, the lesion is in the upper third of the Rolandic convolutions; if the arm, in the middle third of the Rolandic convolutions; if the face, in the lower third of the Rolandic zone. And we may more precisely localize in the upper or lower half of these divisions respectively, according as the proximal or distal movements are more particularly affected. Lesions of the lower facial region in the left hemisphere are almost invariably associated with motor (Broca) aphasia. * * * In the great majority of recorded cases of cortical paralysis, sensation has been found unimpaired; but on the other hand a considerable number of cases have been put on record, in which, with lesions of various kinds (including tumors) implicating the motor zone, there has been paralysis not only of motion, but also of sensation in a greater or less degree. Very divergent views have been expressed in reference to the interpretation of these facts. * * * The question of the relation of cerebral lesions to affections of common sensibility is one of considerable practical importance in reference to regional diagnosis and operative surgery. I should regard a hemiplegia associated with hemianæsthesia either as a sign of lesion of the internal capsule, or if (as judged by the other indications above mentioned) invading the cortical motor zone, as a sign of implication also of the gyrus fornicatus, or its connection with the internal capsule.

Subcortical lesions of the motor zone produce symptoms not readily, if at all, distinguishable from lesions of the cortex itself. * * * More frequently, however, in subcortical than in cortical disease, there is an absence of that tenderness on percussion or deep pressure which many years ago I indicated as a valuable confirmation of the regional diagnosis founded on the symptomatology. Usually, if not universally, lesions of the cortex, if at all irritative in character, are associated with this localized tenderness to percussion, though no pain may be spontaneously complained of by the patient.

Word-blindness and allied defects in visual ideation indicate destructive lesion of the angular gyrus of the left hemisphere. Not unfrequently irritative lesions of this region cause subjective ocular spectra or visual hallucinations.

Word-deafness indicates destructive lesion affecting the superior temporal gyrus of the left hemisphere. Total deafness may be caused by bilateral lesions of the same region.

II.—May surgical operations be undertaken on the brain and its covering with as great safety as any of the major operations in surgery? I think we may safely say that the motality from all operations, including the removal of even large cerebral tumors, will be found to be considerably less than 30 per cent. This mortality will be found to contrast not unfavorably with that which results from some of the major and generally recognized legitimate operations in surgery.

III.—What diseases and conditions may be considered as justifying or demanding surgical interference with the view to their removal or amelioration?

There can, I think, be little question as to the advisability of trephining in primary cranial injuries, with symptoms of compression or localized paralysis or convulsions with a view to removing depressed fractures, splinters of bone, hemorrhagic extravasations on which these symptoms depended. * * * The question is different when we come to consider the question of secondary trephining with a view more especially to cure epilepsy or similar affections due to, or supposed to be due to, a cranial injury inflicted at a more or less distant date. * * * The cures of traumatic epilepsy by simple trephining, without opening the dura mater should be placed not at 58 per cent, but at the much lower figure of 14.6 per cent. * * * I would say that unless (besides the mere history of a blow on the head) there is clear evidence of local injury in the shape of a distinct cicatrix or depression, and in addition, some signs of localized irritation of the cortex at or near the site of injury, trephining is not indicated, and even then the result is extremely doubtful. The prospects of benefit are much greater when, in addition to trephining the skull, the whole of the cicatrical tissue and irritable portion of the brain cortex are completely excised. * * *

As regards the treatment of cerebral tumors, these, in the great majority of instances, lead to death sooner or later, so that the condition in all cases must be considered desperate. Hence the question is not between the relative advantages of this or that mode of treatment, but between the possibility of removal by operation,

and certain, and too often painful death. Even if we accept as accurate the statistics of Hale White that, at most, only 10 per cent of all cerebral tumors are amenable to operation, this is a fact which we may deplore, but it ought not to influence us against the endeavor to cure if possible, the cases in which tumor is so situated, and of such a character as to admit of removal. And such cases are sufficiently numerous to come at some time or other under the cognizance of almost every physician. * * * Operation is advisable as soon as the nature of the disease has been clearly determined, and before the tumor has acquired such dimensions as to seriously impair the vital resistence, and increase the dangers from shock, hemorrhage and cerebral œdema.

Periphrael Neuritis.

The same number of *Brain* contains a critical digest by H. Handford, M.D., of most of the most valuable recent literature on the subject of peripheral neuritis. It is the most satisfactory review of the recent progress in this line that we have seen. We have only space to excerpt a few paragraphs of more general interest.

Pathologically the position of interstitial neuritis is clear. So, too, though in a less degree, is that of acute parenchymatous neuritis, where there is rapid degeneration of the myelin and the axis cylinder, with proliferation of the nuclei of the sheath of Schwann, and the course is that followed by nerves after division. But there is much doubt whether the subacute and chronic cases of parenchymatous neuritis (so-called) are in any degree inflammatory, and are not either simple or specific *degenerations*.

The latter view is gaining much ground. The neuritis of diphtheritic paralysis, from its very special features and course, would appear more than almost any other to be an example of true neuritis due to a specific poison. It can hardly be due *directly* to the organized virus—micrococcus or bacterium—which is the cause of the throat affection. The organisms would surely have been found, they would surely have produced the same wide-spread necrosis as on the surface, and further the patient during diphtheritic paralysis would remain infectious, which is not the case. That the nerve degeneration is due to a ptomaine produced by the growth of the organized virus in the throat and absorbed, is probable, but the supposition is not free from difficulty.

And lastly the degeneration may be simple and not due to any poison, organized or unorganized, special to diphtheria. These three propositions are open in several other forms of neuritis—*e. g.* in phthisis, syphilis, enteric fever, rheumatism, etc. And the importance of settling the question is this: If the neuritis were a part of the bacterial invasion, which we believe to be the essence of the disease, we would be justified in continuing, notwithstanding our hitherto want of success, to treat the affection by remedies directed against the specific poison. But if it is only a degeneration due to the cachexia left by an exhausting disease, not only would such efforts be demonstrably vain but our course both in the direction of prophylaxis and treatment would be more plain. * * *

The slight implication of the sensory fibers and the remarkable variation in the sensory symptoms is a phenomenon of which many explanations have been given, but none wholly accepted. It is probable that wide-spread and well-marked disturbances of sensation are only found when a main nerve trunk is affected; but when the disease is confined to the smaller peripheral nerves, or possibly in a great measure to the peripheral end-organs, sensory changes are slight or wanting. * * *

In tabes dorsalis, apart from pseudo-tabes or sensory neuritis, peripheral neuritis has been extensively observed and seems to be a portion of the general degeneration process. According to Degerine, muscular atrophy in locomotor ataxia is very frequently due to peripheral neuritis and not to polio-myelitis.

The question has been raised by Leyden and others whether a peripheral sensory neuritis producing the symptoms of pseudo-tabes can spread to the cord and so develop a typical tabes. It is a priori improbable that a degeneration which spreads continuously should not be checked by the interruption in the course of the sensory fibers in the ganglion on the posterior root, but as a matter of fact the question still remains unsettled. * * *

The rapidity of the muscular wasting in the neighborhood of diseased joints was pointed out by Sir James Paget. It is to be seen also in rheumatism and is attributed by Dr. Berry to the same cause, viz.,—either a "reflex mechanism, whereby irritation conveyed along sensory nerves from the joint to the cord, inhibits in some way the functional activity of the motor cells in the anterior horns," as is suggested by the sudden onset; or as the progressive character and duration of the atrophy renders more likely, "some organic change either central or peripheral." It is very probable that in inflammatory joint affections whether of rheumatic, traumatic or tubercular origin, the nerves of the joints become involved in the inflammatory process, and an ascending neuritis travels speedily along them to the nerve trunk, and that the muscular wasting is thus due to a motor neuritis propagated by direct continuity. This theory is simple and will apply to all cases. It does not depend on the existence of a hypothetical rheumatic poison or on a reflex theory, the truth of which in other forms of so-called reflex paralysis there is grave reason to doubt. * * * Whether the acute ascending paralysis of Laudry is due to a neuritis or not, though extremely probable, has not been proved. Transition cases between the very rapid progress of this disease and the slow course of most forms of peripheral neuritis are found, and some are related by Feaucotte.

ABSTRACTS.

Remarks on the Prevention of Hydrophobia by M. Pasteur's Treatment.

Read in the Section of Medicine at the Annual Meeting of the British Medical Association, held in Leeds, August, 1889, by M. Armand Ruffer, M. A., M. D. British Medical Journal, September 21, 1889.

ABSTRACTED BY DR. H. G. HARVEY.

The virus of hydrophobia, or more properly, of rabies, is a particulate virus and is most probably a living micro-organism. It has very little power of resistance, being easily destroyed by heat, drying or sunlight. Exposure to sunlight destroys it in fourteen to thirty hours. A temperature of 45°C. completely destroys its virulence in twenty four hours; of 62° C. in four minutes. The oxygen of the air has a very deleterious effect on it. Low temperatures (30°C.) have no effect on it.

The only absolutely successful means of inoculation is by injecting the virus under the dura mater.

The period of incubation varies in different cases. Cases in which hydrophobia is supposed to have appeared within a week after the bite, are probably cases of acute mania or tetanus. The shortest period is thirteen days; occasionally it extends over a year. It is shorter in young people than in adults, and is distinctly shorter after face bites than after bites in the limbs.

Rabies is always fatal in man. With dogs it is somewhat different. In 1881 Pasteur inoculated three dogs with rabies, two of which died. The third showed the first symptoms and recovered. In 1882 this dog was inoculated two different times under the dura mater without success. The inoculation in 1881 seemed to have rendered it invulnerable afterwards. This fact helped to convince Pasteur that it was possible to vaccinate against rabies.

The virus is always present in the cerebro-spinal axis of an animal that has died of rabies. If a rabbit be inoculated under the dura mater with an emulsion made with the medulla of a rabid animal, the first symptoms of the disease appear within fifteen days as a rule; never earlier than nine. If a second rabbit be inoculated from the first the incubation period becomes shorter, say eleven days; if a third be inoculated from the second, and a fourth from the third, and so on, the incubation period gradually shortens till it reaches six or seven days, when the virus becomes what Pasteur calls "fixed," *i. e.*, the period of incubation is six to seven days always, and the animal dies on the tenth day after inoculation. This fact is allimportant, for it was absolutely necessary before a preventive treatment could be applied, to be supplied with a constant and regular supply of virus of the same strength. At the Pasteur Institute, where patients are vaccinated daily, and, as the animals always die on the tenth day, it supplies in its turn the virus for the day's inoculations.

If the spinal cord of a rabbit, which has died after inoculation with the fixed virus, be suspended in a sterilized bottle, the air of which is dried by means of caustic potash in the bottom of the bottle, and if it be kept at a temperature of 25°C. it is found that, when inoculated under the dura mater of another rabbit, after being dried for one day, it still produces rabies, but death is one or two days later than it would have been had fresh fixed virus been used. If before inoculation it has been dried three days, death is delayed four to six days. If dried nine day, death is delayed seventeen to thirty days. The cord dried twelve, thirteen and fourteen days contains the living organism no longer and is harmless. Thus it is shown that the number of living micro-organisms steadily decreases with each day's drying, until after eleven days none exist in the tissue.

As a result of its life, every living micro-organism excretes substances, just as higher animals excrete urea, carbonic acid, etc. We know also that some pathogenic micro organisms growing in suitable media may produce chemical substances which, when injected into an animal, enable the animal to resist the action of the specific organism producing the disease.

If an emulsion of the spinal cord of a rabbit just dead of rabies be injected under the skin of an animal, two things are introduced: the micro-organisms and the chemical substances elaborated by the same organisms during their life in the cord. If two or three drops of the emulsion are used, a small number of the organisms and a very small quantity of the vaccinating substance are injected, and rabies is almost certain to follow. However, if a very large quantity be used (1 to 30 cc. or more) a large number of the organisms, and at the same time a large quantity of the vaccinating substance is injected. Pasteur has proved that it is possible to vaccinate dogs against rabies by using large quantities of emulsion of the fresh cord. But this mode frequently fails, hence it is not applicable to man.

Cords dried twelve, eleven and ten days contain very few of the organisms, sometimes none, but still some of the vaccinating substance. If, therefore, a man be inoculated on the first day of treatment with an emulsion of a cord dried for fourteen days and of one dried thirteen days, and on the second day with one twelve days old, he has been inoculated with the vaccinating substance alone. On the third day an eleven day's old cord is used, and even if micro-organisms be present, it contains a large amount of vaccinating substance. "If, then, every day the number of micro-organisms injected for preventive treatment becomes greater and greater, at the same time more vaccinating substance is introduced with each injection." In the method known as the "simple method," "M. Pasteur injects on the first day an emulsion made with the spinal cord dried during fourteen days, and with one dried during thirteen days; on the second day, an emulsion made with one dried twelve days, and with one dried eleven days; on the third with one dried ten days and one nine days," etc.

Several deaths having followed the use of the simple

method after severe bites by wolves and face bites by other animals, Pasteur concluded that the method was not powerful enough and invented the intensive method. The idea in this method is to inject large quantities of the vaccinating substance as soon as possible. In the simple method the cord dried six days is injected only on the fifth day; in the intensive on the third day. There are other differences, but this conveys the main idea. Each injection consists of about ½ cc. of cord crushed in 2 cc. of sterilized beef tea and is put into the subcutaneous tissue of the abdomen.

After stating certain precautions against producing abscesses, erysipelas, etc., the author says: "I have seen many thousands of inoculations at the Pasteur Institute without ever seeing an abscess."

The number of days the treatment occupies is not stated.

"Supposing one of my patients or myself to have been bitten by a rabid animal, would the chances of life be greater by trusting to luck, or by at once going to be inoculated according to M. Pasteur's method?" The question is answered by statistics of cases previous to and following Pasteur's treatment. It is necessary to distinguish between people bitten by rabid domestic animals and rabid wolves. In the first class the mortality shown by various reliable statistics varies between 15% and 21.73%. Mortality from wolf bites is 60 to 64%. Face bites are still more deadly, the death rate being about 80%. In the statistics taken at the Pasteur Institute the cases are divided into three classes: First, those bitten by animals positively found to have been rabid. Second, those bitten by animals certified by veterinary surgeons to have been rabid. Third, those bitten by animals suspected of being rabid.

From November, 1885, to January, 1886, 2,164 patients belonging to the first class were inoculated at the Pasteur Institute. Of these 32 died (1.47%). Of 518 belonging to the second class 3 died (0.58%). In some of these cases treatment was not early enough to have effect before the patient died. 136 of the 2,164 were treated by the simple method. Not satisfied with these results Pasteur inoculated 50 by the intensive method without a death. In Paris in 1887, 350 people were bitten by rabid animal; 306 of these were treated, 3 of them died (0.97%); 44 trusted to luck, 7 died (15.9%).

Statistics from antirabic institutes in Warsaw, St. Petersburg, Odessa, Moscow, Turin, Palermo, Naples, Constantinople and Havanna are given. Some of these show better results and some not so good as those of the Pasteur Institute; but all show a great decrease of mortality due to the treatment. In 1888, of 119 people in Russia bitten by wolves and treated by the Pasteur methods, 8 died (6.72%). It should be remembered that the mortality in such cases when not treated is 60 to 64%.

"Are there any cases on record in which it can be proven that death has followed as the result of M. Pasteur's treatment? I say, and say it without the least hesitation, there is no such case on record." All the medical men assisting in the department have been inoculated as a preventive measure without any bad effects.

Dr. Drysdale (London), in commenting on Dr. Ruffer's paper, "could not help expressing his personal obligations to M. Pasteur as the greatest benefactor to mankind that had existed in this century since the days of Jenner, and he only regretted that the medical profession could not claim him as a member."

A Case of Leprosy Apparently Arrested.

BY WYNDHAM COTTLE, M.A., M.D., OXON.

Abstracted by Dr. Wm. N. Beggs.

First account of the case was published in 1879.

Patient was born in London and spent his youth there. Then went to Jamaica; and having remained there 24 years, returned to London in 1877. The first symptoms, large patches of decoloration on legs, were noticed in May, 1878. Patches, on face and arms followed. In September, 1878 small doses of chaulmoogra oil were prescribed.

"On March 10th, 1879, he presented the following appearance: He was hale and well-nourished. There were dusky-red, raised patches, two or three inches in diameter, scattered over the face, neck, body, and limbs, with the characteristic leonine expression of countenance and thickening of the ears and of the tissues in the positions occupied by the spots. A superficial ulcer existed on the outside of the left leg, and one spot on the right thigh; and the insides of the feet, from the great toes to the heels, were anæsthetic.

The chaulmoogra oil was continued in dram doses three times a day. The ulcer on leg rapidly healed. In September, 1879, some of the spots had disappeared, many had faded in color and lost some of their thickening, anæsthesia was less marked, and patient's general condition was improved.

Oil was continued in decreasing doses. In 1888 the only evidence of his having had the disease were slight brownish staining of skin of the backs of hands, and some loss of sensation about parts of the hands and feet. General health was excellent.—*Brit. Med. Jour.*

Clinical Lecture on the Common Diseases of the Breast.

BY CHRISTOPHER HEATH, F.R.C.S.

The practical point in atrophy of the breast is whether or not it, especially the nipple, is sufficiently doveloped for maternal duties. Many women have very sessile nipples. In this case it is necessary to draw it out with the breast pump.

The nipples of primiparæ should be bathed with brandy and water to prevent cracked nipples. The great cause of sore nipples, however, is the constant

moisture often resulting from an overflow of milk. When this occurs a nipple glass should be worn to collect the excess of milk.

A good remedy for sore nipples is nitrate of silver if properly applied. It should not be applied solid. A 10 gr. solution should be used. The nipple having been thoroughly dried, the solution should be applied by means of a camelshair brush, to any little crack which may be seen.

Sore nipples may be caused by an aphthous condition of the child's mouth. In this case both nipple and mouth may be treated with glycerite of borax.

Syphilis is also another frequent cause of sore nipples. A syphilitic nurse should never be allowed to nurse a healthy child, nor should a syphilitic child be placed to the breast of a healthy woman. A common mode of communication is by kissing, the nurse having syphilitic ulcers in her mouth. The child may then infect the mother's nipple.

As a result of sore nipple it becomes very tender and nursing becomes too painful to be endured. In this case a nipple shield of glass with a rubber cap should be used.

If a woman neglects her breasts on account of pain in nursing, they become engorged with milk, a stage preliminary to mammary inflammation. The milk should then be drawn by a milk pump, or it may be expressed by gentle manipulation and pressure upon the breast, the operator standing behind the patient.

If it is desired to arrest the secretion of milk, the best means is belladonna mixed with glycerine. It should be applied thoroughly.

Inflammation must be relieved as soon as possible. An abscess must be opened at the earliest possible time and in a dependent position if possible. Do not poultice for too long a time before lancing. When applied to long nothing but injury is the result. As soon as pus is present it must be released. Better incise too early than too late.The incision should radiate from the nipple. Insert drainage tubes so that the opening shall be dependent. Do not use too many, however, nor leave them in too long. They have generally accomplished their purpose in two or three days. Do not lose the drainage tubes in the abscess as it produces chronic suppuration.—*Brit. Med. Jour.*

THE TREATMENT OF DIFFERENT FORMS OF HEMIPLEGIA.—Dr. J. Hughlings Jackson, in *Brit. Med. Jour.*, says: "The type of syphilitic hemiplegia due to a syphilitic endarteritis, is not cured by drugs. After the artery is obliterated and softening occurs, drugs will do nothing toward curing the paralysis. But active treatment should, nevertheless, be carried on with mercurials and iodides, in order to prevent similar occlusion of other vessels. There is no doubt that some of these cases of hemiplegia do recover, but not from treatment. All cases of hemiplegia, from whatever cause, that get well, do so through the law of compensation by other nervous elements. This compensation will depend materially upon the smallness and position of the lesion.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,
EDITOR.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, OCTOBER 26, 1889.

THE EXAMINATION OF THE URETHRA.

A number of instruments have been devised for the examination of the urethra which assist materially in obtaining reliable information regarding its calibre, the location and extent of strictures, etc. One of the best is Otis' urethrameter, but all have the disadvantage that in the hands of different persons they give varying results in the same case and the accuracy of the information obtained is in a great degree dependent upon the skill of the operator.

R. W. Stewart, M.D., of Pittsburgh, has devised an instrument which he calls the urethrograph, described in the *N. Y. Med. Jour.* It is constructed much on the same plan as the sphygmograph, and one of its chief advantages is that like the latter it furnishes a diagram. This diagram is a reproduction of the contour of the urethra on cardboard, which may be examined at any time and kept for future reference or comparison with subsequent diagrams.

"It resembles closely a catheter inserted into a handle. Its anterior extremity, which is curved to permit of its introduction into the bladder, terminates in two jointed arms on either side, which present a smooth convex surface to the urethra. By means of a spring within the handle these arms are expanded until arrested by pressing against the urethra; the pressure exerted by these arms is uniform, and may be modified as desired by means of a screw at the handle. Beneath the handle there is a marking arm so connected with the jointed arms already mentioned that, as the latter contract or expand in following the irregularities of the urethra, the marking arm draws a line on a strip of cardboard, which is marked longitudinally into millimeters and transversely into inches so that at a glance the size and position of any portion of the urethra may be ascertained."

It is claimed that this instrument will make a record, accurate, and yet independent of the skill of the operator. It is unquestionably a valuable addition to our stock of urethral instruments.

The Use and Abuse of Antiseptic Injections in Obstetrical Practice.

At the late meeting of the American Gynecological Society, Dr. H. J. Garrigues, of New York, read a paper with the above title. He believes that vaginal injections are useful before delivery, though objected to by many writers on the ground that they are dangerous because the lubricating mucus was removed, etc. In answer to the objections that the bacteria on the surface of the vaginal mucous membrane were harmless, it must be remembered that they would not be harmless should they penetrate the subjacent tissues. They would also be an element of danger when carried from the vagina into the womb. If vaginal injections were used prior to labor, the vagina would be dilated and the microbes removed or destroyed.

Preliminary disinfections of the vagina are useful. If frequent examinations are required during labor, vaginal injections should be made once in three hours, and during the intervals a pad of absorbent cotton should be placed over the vulva. Injections after normal labor are not indicated, and there is no danger of infection if the labor has been aseptic. If the labor has been abnormal, vaginal or uterine injections will be required *pro re nata.* If the lochial discharge is fetid, intra-uterine injections are usually required, likewise for the removal of debris in cases in which there has been sloughing and in cases in which the fœtus is macerated. Should peritonitis occur, the intra-uterine douche should at once be given, likewise after abortion, the uterine contents having first been removed. Solution of bichloride of mercury 1 5000, should be used with care for these injections, and discontinued as soon as toxic symptoms disappear.

Since 1884, twenty-two fatal cases from the use of these injections have been reported, but in most of them the solutions were too strong, or too frequently administered, or improper in some other way. Contraindications to injections are anæmia, kidney disease, and diarrhœa.

Injections of carbolic acid benumb the hands of the the operator, and sometimes affect the entire nervous system of the patient.

Hydranaphthol has low germicidal powers, besides being a proprietary preparation.

Creolin is highly approved by the author, as it makes the surface of the mucous membrane slippery; it is also a powerful hæmostatic. It is objectional because, being used as an emulsion, it may obscure objects with which it is brought in contact. Its odor is pleasant, and used in a 2% solution it is, in the author's opinion, the best means which we now have for intra-uterine injections.

In uterine injections the tube should be introduced gently, as preforation has resulted from forcible insertions. Two or three pints at a temperature of 110° to 115° F., should be employed; for the vagina two or three quarts may be used. After intra-uterine injections all fluid should be removed from the womb and vagina.

Thalline or Thallium.

An exchange notes the fact that these are frequently confounded by druggists and physicians, although there is the greatest dissimilarity in their natures and manner of action. Thalline is an alkaloid, a synthetical preparation of a certain coal-tar derivities, and is usually ordered in the form of the sulphate, sometimes the tartrate. Thallium, on the other hand, is one of the elementary metals, and moreover a violent poison as shown by experiments on the lower animals. We do not know that it has any therapeutic value.

The most frequent error is the prescribing of thallium sulphate where thalline sulphate is intended.

It is also said that some have an impression that they are identical in their therapeutic proprieties; this idea should be promptly corrected.

The mistake has been made by medical journals of high standing. Their researches on the therapeutic value of thalline were published in the London *Medical Record*, but were copied into *Nouveaux Remedes* under the title of "Effets des sels de thallium sur les gonococcus."

Such mistakes could be easily avoided.

In naming the new remedies which are constantly being brought forth, the twenty-six letters of the alphabet certainly afford sufficient room for combinations different from those already existing, or at any rate sufficiently dissimilar to be easily apparent. The above is only one of several cases in which confusion might arise. This christening could be done, too, without resorting to naming a new remedy *anti* this or *anti* that; such titles would seem to indicate a remarkable paucity of ideas or want of originality on the part of the inventor.

Can a Surgeon Remove the Wrong Eye of a Patient Who is Under the Effects of Chloroform?

Some twelve years ago, while attending medical lectures, I was told by one of the professors, that a surgeon (?) in Germany had placed a patient under an anæsthetic for the purpose of removing a diseased eye, and by mistake he removed the sound eye. I have never read of, nor heard the professor's statement refuted or even denied, till I read a paper in the August number of *Practice* by Dr. Chisholm, of Baltimore. He said that he had been told recently, that an ophthalmic surgeon in Virginia and one in New York had each made

this mistake. Dr. Chisholm said: "Such a blunder could not be made and it never has occurred."

Certainly no such mistake could be made by so skillful an ophthalmic surgeon as is Dr. Chisholm, but I think it rational to suppose that it may occur at the hands of some persons who essay to remove eyes. Glioma of the retina may be diagnosed by a surgeon (?) who is not competent to remove an eye properly, yet he may proceed to perform the operation. When the patient is under the anæsthetic, the surgeon must rely upon his memory, and the reflex from the fundus of the eye, as the dilatation of the pupil could not well be relied upon. There may be no external evidence of the disease. The changing of the patient's posture from sitting to lying upon his back, and the relative position of the surgeon to the patient may confuse the mental image of the latter and he be quite positive that he is to operate upon the sound eye. I assisted an able surgeon on one occasion to remove such an eye, and he had forgotten which eye contained the tumor. He declined to operate until he had again seen the tumor by an artificial light.

Now, when I know that a surgeon (?) has applied stick-copper to a prolapsed iris, thinking that he was treating a "granulation," and that an oculist (?) has diagnosed a tumor of the iris as a cataract, and another has treated a mild case of conjunctivitis accompanying an iritis, as granular lids, and failed to recognize the iritis, I cannot but conclude that the removal of a sound eye by mistake is a possibility when patients are in the hands of some men.

It is a pity that the great majority of persons, who have eye troubles, have no way of knowing who is competent to treat them and who is not. R. L. T.

MEDICAL ITEMS.

Sulphur as an Antiseptic.—Semmola proposes sulphur as the coming antiseptic, most serviceable he thinks for use in derangements of the alimentary canal.

Mrs. Berchard, of Fairmont, Mo., gave birth recently to a fully developed child in five days less than nine months after the birth of her first child. Dr. McReynolds was the attending physician.

The Training School of Johns Hopkins Hospital.—The Training School of the Johns Hopkins Hospital, Baltimore, was opened with appropriate ceremonies on Wednesday afternoon, October 9, at half past three o'clock.

Ignorance Supported.—At a meeting of a board of school trustees in England (*Lancet*) a member moved that the children afflicted with granular lids be bathed separately from the other children. He said there were 166 cases of ophthalmia at the schools out of a total of 336 children; only 9 of the sufferers were in the hospital, the remaining 157 being in the body of the school with the healthy children. Mr. Bart opposed the motion, saying it was a great assurance for any one to interfere with the doctor at the schools. The motion was put and lost.

The German Pharmacopeia.—The preparation of the third edition of the German Pharmacopeia is to be begun this month in Berlin by the Imperial Pharmacopeia Commission of Germany. It is intended to have the work completed by 1890. The work will be very comprehensive; a Society of Apothecaries will include the non-official remedies.

Death of Professor Voltolini.—Professor Rudolph Voltolini of Breslau, died on Sept. 11, in his seventy-first year. He was well known in the field of laryngology, and wrote a number of able works dealing with his specialty, besides being one of the editors of the *Monatsschrift f. Ohreheilkunde*, which position he held up to the time of his death.

The Power of Resistance of the Egyptians to Surgical Procedures.—According to the Egyptian correspondent of the *British Medical Journal*, people of Egypt exhibit a remarkable freedom from the influence of surgical shock. A man whose leg had been amputated was found sitting up in bed two hours after the operation; a woman, from whom the breast had been removed, got up the next day and walked around.

Illegitimacy in Europe.—The following is the ratio of illegitimate births in the various countries in Europe; Spain, 7%; Italy, 11%; England, 16%; Germany, 24%; in Paris, 38% amongst people of French nativity. It would be interesting to trace out the causes of the above proportions, for the percentages certainly do not agree with the commonly accepted ideas as to the comparative social morality of the countries named.

Effects of the London Strike.—By the late strike in London the erection of the new edifice of the Royal Medical and Chirurgical Society has been materially retarded, so that it is doubtful whether it will be ready for use during the coming winter, The Pathological, the Clinical and the Obstetrical Societies expected to enjoy the privileges of the new buildings, but are now left for an indefinite period without suitable accommodation for their meetings.

Precocious Menstruation.—In an exchange we notice the report of a case of precocious menstruation. The case is a negro child, born in October, 1885, and began to menstruate in July, 1887. She has been menstruating regularly ever since, the discharge being normal as to time, quantity and material. The child is well grown, and intelligent for her age, with breasts fully developed and pubes wearing the adult garb. She

is the tenth child of her parents, who are each about forty-three years of age and in good health.

THE TREATMENT OF TYPHOID FEVER BY COLD BATHS.—This treatment was introduced into Australia in 1887, since which time it has been used continuously in the Brisbane Hospital, with the most satisfactory results. The mortality, which was from 12 to 20% before that time, has been reduced to 7%. And if the cases are excluded in which death occurred within 24 or 36 hours after the onset, the mortality is now only about 5.2%. Deaths from syncope, hæmorrhage, perforation, etc., have not been lessened materially, but pneumonia is much less frequent.

HAIR IN THE URINE.—A case is reported in the *Lancet*, by Dr. O'Neil, of a patient who passed hair in the urine for a long time. The hair ranged from ½ to several inches in length, was of various shades of color and was accompanied by epithelial scales, blood corpuscles and, rarely, pus cells.

The man, æt. 50 years, was carried off by a sudden severe diarrhœa, after the above mentioned phenomena had continued for some months; unfortunately a post-mortem was not obtained. The author conjectures that the blood proceeded from a villous or papillomatous tumor of the bladder and that the hairs grew on the mucous membrane from which they were constantly shed. Another theory might be that of a congenital cyst with inclusion of some of the fœtal elements, remaining quiescent until late in life and then ulcerating into the bladder.

TUBERCULOSIS OF THE PENIS.—Dr. Kraske, according to the *Revue des Sciences Medicales*, has observad a case of tuberculous ulceration of the urethra extending from the membranous portion to the vesical orifice, in a subject thirty-three years old. The diagnosis of chancre of the urethra had been previously made. The autopsy showed advanced tuberculosis of the genito-urinary tract, and pulmonary tubercles, as well.

In another case, a man, æt. 49 years, a tuberculous ulceration existed on the dorsum of the glans, the size of a cent piece. Chancre had been diagnosed in this case also. There was no sign of pulmonary complication. The glans was amputated, when it was observed that the tuberculous infiltration extended much further into the cavernous tissue than had at first been suspected. The patient recovered quickly thereafter. Examination to discover whether the infection was from genital contact was attended with negeative results.

TREATMENT OF BUBO BY THE INJECTION OF IODOFORM VASELINE.—Dr. Routan obtained the most rapid response from this method, which is carried out after this fashion: 1. Thorough antiseptic preparation, by washing, shaving, etc., of the affected part. 2. Puncture with the lancet, if the skin is thin; with the bistoury, if thick, and the pus be deep. 3. Evacuation of the pus and all liquid contained in the cavity, by sufficient compression. 4. Injection of iodoform vaseline, liquefied by heat. 5. Dressing with bichloride cotton.

Bubo may frequently be aborted, or its further progress cut short, by first puncturing the skin and affected gland with a sharp, narrow, bistoury, following this with a probe, which is used to break up the structure of the gland; an endeavor is then made to express the contents of the inflammatory focus. Antiseptic dressing follows, on the top of this a sand bag or other weight is laid, and maintained until the swelling, etc., disappear.

BOOK REVIEWS.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS. VOL. III, No. 3, SEPTEMBER, 1889.

"Congestive Neurasthenia, or Nerve Depression." By E. G. Whittle, M. D., F. R. C. S., London, Eng. Senior Surgeon to the Royal Alexandra Hospital for Sick Children, Brighton.

The distinct issue which is raised in Dr. Whittle's essay, occupying 48 pages of the September issue of Wood's Medical and Surgical Monographs, and one which deserves the careful attention of all practical men, is a novel treatment of the class of diseases referred to, by depletion. The book is a careful clinical study of certain forms of neurasthenia which are sufficiently indicated by peculiar symptoms as to distinguish them, representing a condition of ill health not infrequently met with, and causing suffering which has not as a rule readily given way to the usual methods of treatment.

"THE ART OF EMBALMING." By Benjamin Ward Richardson, M. D., F.R.C.S., London.

For the imagination embalmment possesses a certain charm, but one is tempted to ask with Washington Irving, "What is the security of a tomb, or the perpetuity of an embalmment? The remains of Alexander the Great have been scattered to the winds, and his empty sarcophagus is now the mere curiosity of a museum." Nevertheless there are sympathetic wishes to be gratified and necessary purposes to be carried out, and to these ends the art of embalmment must lend its aid.

It is a well known fact that the operation of embalming human bodies for sentimental reasons prevails in this country to a much greater extent than elsewhere. Even if the operation were reserved for this purpose only, it would be eminently suitable for physicians to be acquainted with its details; but the necessity of preserving bodies for scientific investigation and other similar purposes affords good reasons why physicians should familiarize themselves with, and even cultivate, the most perfect knowledge of the art, which really rests on the purest basis of science. There is nothing so difficult in the process but what any practitioner can perform it as easily as he can perform a post-mortem examination; and when he has before him the simple rules which Dr. Richardson has laid down in the 45 pages devoted to

his essay in the September issue of Wood's Medical and Surgical Monographs, he will find the task easy. The doctor has supplied not only an interesting dissertation on the subject, but from an experience derived from years of observation, and based on many actual embalmments, completes his work by supplying that which is more immediately practical, a perfect hand-book of the art. The reader will find in it descriptions of all the known processes, the apparatus required, formulæ of preservative fluids, and explanations of the minutest details of operation. And in view of the difficulties heretofore encountered in practising the art, it is interesting to note the author's assurance that a careful perusal of the instructions which he gives will enable any medical man to carry out the details himself with perfect confidence and success.

"The Etiology, Diagnosis and Treatment of Tuberculosis." By Professor Dr. H. von Ziemssen, Director of the Medical Clinic, Munich.

This is probably the latest authoritative exposition of the present status of this subject, and is included in 71 pages of the September issue of "Wood's Medical and Surgical Monographs." After discussing all the essential factors which favor the colonization of tubercle bacilli in human organism, he gives a brief description of our knowledge of the mode of colonization, proliferation and spread of the bacilli, and of the powers of resistance which the organism has at its disposal, and in conclusion admits that there are many questions in the great field of tuberculous diseases still remaining to be solved, before all the conditions of the life, activity and death of the tubercle bacillus are so well known that it will become possible to destroy this hereditary foe of the human race.

In regard to the therapeutics of tuberculosis, after quite extended notes on precautionary measures, hygiene and sanitation, the various methods of treatment are detailed and their value discussed.

The profession should be encouraged by the success of Koch, and realize that whatever advances may be further made will be the result of earnest effort in thorough investigation. If these lectures shall assist the direction of such efforts to the accomplishment of even the slightest advances in our knowledge, they will indeed have done a good work.

"Psycho-Therapeutics, or Treatment by Hypnotism." By Dr. C. Lloyd Tuckey, London, Eng.

There have been published in various foreign languages more comprehensive treatises upon the use of hypnotism as a therapeutical agent than this small work of Dr. Tuckey's, which, though it includes but 64 pages of the September issue of "Wood's Medical and Surgical Monographs," serves its purposes in giving a full description of the process of hypnotic treatment as carried out at Nancy, and indicates the class of cases best suited for that treatment. Dr. Tuckey has evidently made himself thoroughly acquainted with the subject by practical experience, and has investigated it more as a careful scientific observer than as an enthusiast. The therapeutical use of hypnotism or suggestion has for some time attracted so much attention abroad that it is surprising that it has not long since become a more general subject for trial in this country; considering how prompt the profession in America usually are to investigate new methods. Physicians who have lately traveled in Europe, or those who have kept sharply abreast with the progress of medical science abroad, have had reason to marvel at the extent of its use and realize their unfamiliarity with the various details of the system. The prevailing idea that hypnotism is so thoroughly given up to quackery as to be unworthy of careful scientific investigation and application is hardly justified by the standing it has obtained in the highest medical circles abroad under the name of Treatment by Suggestion, and it has so far attained its fullest development in Holland, where in every large town it is followed by at least one well-qualified practitioner; while in Germany, Russia, Sweden, and indeed every European country, its position is secured by the support of leading physicians, and by the success attending their practice. The introduction of the system was at first opposed by persons who feared the popularization of so potent an agent; but as the beneficial results of the treatment became manifest, opposition decreased, and has now almost died out. This is doubtless due chiefly to the fact that the treatment has not been allowed to fall into the hands of ignorant and unqualified practitioners, but has been accepted by men of high character and professional repute.

Dr. Tuckey's little book will be an important addition to our literature, inasmuch as it is the first practical exposition of the Nancy system that has appeared in this country.

"Sexual Activity and the Critical Period in Man and Woman." By Dr. Louis de Sere, Inspector of the Bureau for Verifying Deaths; Original Member of the General Society of Statistics of Paris; Member of the Paris Anthropological Society; Commander of the Persian Order of the Lion and the Sun.

Dividing the term of life of man and woman into different stages, designated as the first and second infancy, adolescence, puberty, sexual activity, the critical period, old age and decay, Dr. De Sere has supplied a scholarly treatise setting forth his theory regarding the two periods, sexual activity and the critical period, with a view to demonstrating that although these stages in man and woman have some different characteristics, there is good reason to believe that the periods in both are equally well marked and indicate a physiological similarity clearly defined. The existence of a sexual equilibrium, and his theory regarding the method of its maintenance, is introduced as indicating the natural tendency to a physiological similarity. Believing that the existence of a critical period in man could be demonstrated in fact, as it had been in reason, the distinguished writer has been engaged for many years in seeking for characteristic evidence of it and deems the

data which he offers as fully corroborating his theory. His conclusions convey a graphic description of the decline of life and the attendant phenomena connected with the waning of sexual power, and the whole brochure, which is included in 32 pages of the September issue of "Wood's Medical and Surgical Monographs," is an exceedingly valuable contribution to science, and an interesting literary production, whose brilliant style has been well retained in an able translation.

Transactions of the Texas State Medical Association, Twenty-First Annual Session, held at San Antonio, Texas, April 23 to 26, 1889.

This volume is well prepared, and contains many interesting papers, amongst which we note the following: Chloroform as an Anæsthetic, and How to Administer It; by Q. C. Smith. The Treatment of Anal Fistulæ without Cutting Operation; by T. J. Bennett. Functions of the Spleen, with Report of a Case of Abscess of the Spleen, the Result of an Injury; by W. P. Fleming. Rabies and Anti-Rabic Inoculations; by A. E. Spohn. Continued Fevers in Texas; by H. A. West. Great Enlargement of the Thyroid Body During Menstruation; by A. M. Antrey. Abdominal Surgery; by B. E. Hadra. A Case of Alexander's Operation; by L. L. Shropshire. Abortion and Premature Labor—Their Frequency, Causes, Means of Prevention, and Management in General; by T. J. Bell. Tyrotoxicon and Peptotoxine; by J. W. Carhoot. Electricity in Obstetrics and in the Diseases of Children; by F. T. Paine.

BOOKS AND PAMPHLETS RECEIVED.

Transactions of the Texas State Medical Association, Twenty-First Annual Session, 1889.

A Year's Experience with Apostoli's Method, with Reports of Cases. By A. Lapthorn, Smith, B.A., M.D., Lecturer on Gynecology, Bishop's College, Montreal; Surgeon to the Women's Hospital. Reprinted from "Am. Jour. of Obst.," August, 1889.

Announcement of the Medical Department of the University of Wooster, of Cleveland, Ohio.

Practical Notes on Urinary Analysis. By William B. Canfield, A.M., M.D., Chief of the Throat and Chest Clinic, and Lecturer on Normal Histology, University of Maryland. Reprinted from "Md. Med. Jour."

The Fatality of Cardiac Injuries. By H. A. Hare, M.D., (Univ. of Pa.), Demonstrator of Therapeutics and Instrutor in Physical Diagnosis in the medical Department and in Physiology in the Biological Department, University of Pa. Reprinted from the "Med. and Surg. Reporter."

The Effect of the Entrance of Air Into the Circulation. By H. A. Hare, M.D., etc.

The Duties and the Compensation of the Local Health Officer. By Henry B. Baher, M.D., Secretary of the State Board of Health, Lansing Mich.

Names and Addresses of of Health Officers in Michigan for the year 1889–90.

Clinical Observations on Some of the Effects of Direct and Indirect Traumatisms of the Brain. By R. Harvey Reed, M.D., Mansfield, Ohio, Surgeon to B & O. R.R., Member Am. Med. Ass'n., Am. Public Health Ass'n., Brit. Med. Ass'n., etc. Reprint from "Times and Reg.," August 24, 1889.

Transactions of the Louisiana State Medical Society, Eleventh Annual Meeting, held at New Orleans, April 9, 10 and 11, 1889.

The Pseudo-Parasitism of Diptera in Man, or Myosis. By Hugo Summa, A.M., M.D., Professor of Physiology, Histology and Pathology, St. Louis College of Physicians and Surgeons.

Urinary Calculus and Lithotomy. By Thos. W. Kay, M.D., Scranton, Pa. Reprinted from "Md. Med. Jour."

The "Perfected Evacuator." By Fessenden N. Otis, M.D., Clinical Prof. of Genito-Urinary Diseases, College of Physicians and surgeons, New York; Consulting Surgeon to Charity Hospital, to New York Skin and Cancer Hospital, to St. Elizabeth's Hospital, to the Manhattan Eye and Ear Hospital, etc. Reprinted from "New York Med. Jour.," August 24, 1889.

Resumé of the Experience of Seventeen Years in the Operation of Dilating Urethrotomy. By Fessenden N. Otis, M.D. Reprinted from the "Med. Record," July 20, 1889.

A Description of Grove's Spray Baths, Suitable for Barracks, Schools, Factories, etc. By David Grove, Engineer to the Imperial German Court.

Bible Talks with Children, or Scriptures Simplified for the Little Folks. By Rev. J. L. Sooy, A.M. Illustrated. P. W. Ziegler & Co., Phila., 1889.

SOCIETY PROCEEDINGS.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Annual Meeting held at Evansville, Ind., Sept. 10 to 12, 1889.

Dr. Frank C. Wilson, of Louisville, read a paper on

Differential Respiration

and exhibited an apparatus devised by himself by means of which this treatment might be applied. By the term differential respiration is meant the breathing of air under different degrees of atmospheric pressure. In order to show the capability of the instrument to develop respiratory capacity, he mentioned a case in which four inches had been gained in the chest measurement in a few weeks. The instrument was such that the patient could both inspire and expire through the same tube.

Dr. Wm. Porter, of St. Louis, read a paper (to be published) on

The Contagiousness of Tuberculosis.

Discussion.

Dr. Theo. Potter, Indianapolis, Ind.—It is true that certain diseases may be transmitted by heredity; small-pox, scarlet fever, etc., may be transmitted in this way. Anthrax is transmitted through the placental circulation. We are warranted now in being more hopeful in regard to this matter of heredity; statistics, which formerly gave 40% of cases derived through heredity, have dropped to 14%.

Dr. C. R. Early, Ridgway, Pa.—I had in my practice a family, the mother of which bore five children. She was tuberculous. One child was born just before she died; it died four months afterwards. The husband married another lady who also died of tuberaculosis; but he had good health and lived for eighty years.

Dr. J. A. Cutter, New York.—These so called bacilli are nothing more than a stage of the growth of the vinegar yeast plant. Consumption is curable; even where there are cavities, and when they have bled and bled repeatedly. The pre-tubercular stage can be diagnosed and the diseas prevented, by examinations of the blood.

Dr. G. V. Woolen, Indianapolis, Ind.—This is simply a continuation of that everlasting question, heredity; until that is settled, there never will be any solution of the question. I ask, can the disease become hereditary? I say, no. There is simply a type of constitution transmitted, not the disease itself. That may be done just the same as the color of the eye, or the contour of the head. If you admit the transmissibility of the disease, your have to admit the transmissibility of the germ through the sperm cell, which necessitates the acknowledgement that the germ-cell will tolerate a poison, which can go on through the growth of the constitution and finally bloom out and kill the patient. There can be no such thing. It is all presumption to say that that is possible. So that when we get away from this idea of the transmission of disease and think of the congenital idea of its transmission, we get a proper impression.

Dr. Brayton.—Six years ago Dr. Brose, of Evansville, was the first to report the result of experiments which showed that tuberculosis could be transmitted from animal to animal. His report received but little attention at the time, but what an advance has been made in that direction since then! If members would follow his example and make the experiments themselves, they would surely be convinced of the microbic origin of the disease.

Dr. Dudley S. Reynolds, Louisville, Ky.—To summarise: Experimental observations have demonstrated transmissibility of tuberculosis, and the disease depends on the bacillus tuberculosis. It has been shown that the choicest food for the growth of these bacilli is the leucocyte. The most important protection against the invasion of diphtheria is a sound membrane. This applies to the consideration of the manner of acquiring tuberculosis. It has been denominated the disease of the respiratory apparatus: many of the best clinical observers explain this tendency of tuberculosis to develop on catarrhal pneumonia, on the ground that the air tubes are filled with mucus which catches the bacilli and holds them there. Such are the cases that develop galloping consumption. The vinegar yeast-plant theory is an entire novelty to me; I don't think that anybody has been able to establish any such causal relation except Dr. Cutter.

Dr. Jos. Eastman, Indianapolis, Ind.—The whole course of the disease represents a struggle between the baccillus and the blood corpuscle; the lesson to be learned is that we should increase the vital force and in this way diminish the power of the bacillus.

Dr. J. A. Larrabee, Louisville, Ky.—We seem to be losing sight of the great fundamental fact that no single cause can produce the disease. We are dual and the causes of disease are dual. It requires a predisposing and an exciting cause. The theory of the micro organism must be accepted; we are surrounded by the elements of death continuously. But to accept this theory as the only cause, is to step across the chasm without keeping our bridge. As to lung exercise, I think that is one of the most important parts of the treatment. Why are tubercles deposited in the apices? Most probably because the apex is exercised less than the rest of the lung.

Dr. M. C. Chapman, Toledo, O.—The question of heredity is not one of the transmission of the disease but is one of the inheritance of a tendency of the constitution which leads to the disease. If put in the way of these germs, they will take hold and fructify. If you say that the parents can carry the germ of the disease, how do you account for its skipping over one generation and then manifesting itself? And yet this is a well known fact.

Dr. C. F. McGahan, Chattanooga, Tenn.—As to the question of heredity, I rank myself with Drs. Woolen and Chapman. I accept the remarks of Dr. Chapman also regarding treatment. The tonic and nutritive plan is the best.

Dr. Wm. Porter.—I do not believe that the direct inheritance of tubercle is proven; but there is an inheritance of the predisposition which favors the growth of the bacillus. One of the most important subjects, as far as our ability to cure the disease is concerned, is that of the chest exercise, and I cannot endorse too highly all of the conscientious efforts made by scientific workers to accomplish this end. How do exercise, good food, chest development, etc., act as antidotes to the bacillus? By the good health which they produce.

Dr. Wilson.—As far as heredity is concerned, I don't suppose anyone contends now that the disease is actually transmitted, but it is generally admitted that only the predisposition is transmitted. The good that

you get from the various forms of treatment mentioned is derived from the benefit to the general health. As regards the influence of the upper altitudes, the patient is forced to breathe a larger bulk of air in order to get a sufficient amount of oxygen, and in this way he exercises his lungs to a greater degree.

KRAUROSIS VULVÆ

was the title of a paper by Dr. A. H. Ohmann-Dumesnil of St. Louis.

The author began his paper by stating that the small number of cases hitherto reported, made the subject an interesting one. Breisky, who first discovered this affection in 1885, reported eighteen cases and Jauwsky described six more cases in 1888. The disease consists in an essential atrophy of all or of a portion of the internal female genitals, which may or may not be accompanied by pruritus and peculiar whitish plaques. Robt. F. Weir described in 1875 a case of ichthyosis of the vulva which is strangely suggestive of kraurosis. Abstracts of all of the cases were given as also of ten unpublished cases, of which four were observed by Carl. Heitzman, one by Hyde, one by Bernays and four by the author. In these the symptoms were marked, which leads the author to infer that a more careful scrutiny of patients will show that the disease is much more common than has been supposed.

In making a clinical analysis he cases the main difficulty is to arrive at any satisfactory conclusion as to the etiology of the disease. Some of the cases were married, others unmarried and some prostitutes. Some had had children, others not. Some had gonorrhœa or syphilis or were suffering from leucorrhœa, whereas others were not so affected. Age seems to play no part. Pruritus existed in some and not in others, and the peculiar opaline plaques were not found in all. So that, on the whole, but one constant factor was present, *i. e.*, the peculiar atrophic condition.

In connection with the abstracts of all the cases and histories given, the author presented photographs of some cases. These were highly interesting from the fact that they were the first which have ever been taken and may serve to bring forth the condition in a more lucid manner to those unacquainted with it.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated meeting, September 5, 1889. Dr. C. John Da Costa in the chair.

AN EASY METHOD OF REPAIRING THE PERINÆUM.

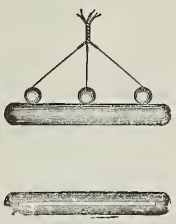
DR. JOHN DA COSTA.—There is probably not any operation in gynæcology which gives a woman so much relief as the proper restoration of a torn perinæum.

In decribing this operation, I shall not say a word in regard to the anatomy of the perinæum, which is the same as it was a hundred years ago. The same muscles are torn now as were torn then. The subject of tear of the perinæum may seem to be a very simple matter; but when we consider that twenty per cent. of women have their perinæa torn in first labor, and four per cent. in subsequent labors, it ceases to be a little matter, and becomes one of importance.

I do not claim anything new. The operation is the result of a combination of old ideas. It is an easy and simple method of repairing the perinæum, and answers equally well whether the tear is long or short. I thought I had something new in the use of these rubber bars, when I got it up eight years ago, but afterwards found that one of my ideas had been anticipated twenty years before.

Mr. Lane, of London, in 1860, used ivory bars with small perforations, and reports thirty consecutive cases without a failure. Dr. Thompson, of Washington, used flat rubber bars with small holes in them, and reports fifty-three consecutive cases all cured. Dr. Thomas, after speaking of the quill suture, leads us to infer that he used perforated bars, and states that he does not recall a failure in the operation.

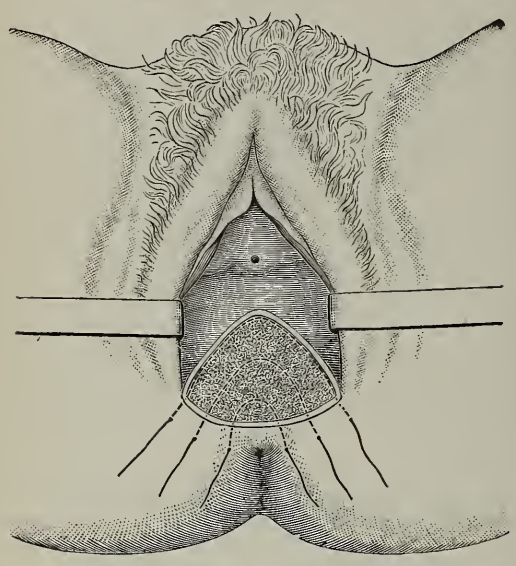
I do not know how many present are believers in the idea advanced four or five years ago, at the meeting of the American Gynæcological Society in this city, "that there is not such thing as a perinæum;" but there certainly is a triangular body between the vagina on one side and the rectum on the other; and this triangular body is often torn through during labor, and becomes what I call a ruptured perinæum. There are many ways of repairing it. Some are very simple, some are very striking, but very useless; what I strive to do is to restore the perinæum very much as nature made it. The operation is easy, and the armamentarium is simple. We require a pair of scissors (I use a pair of blunt-pointed scissors), a perineal needle, a little silver wire and shot, a shot compressor, and two bars shaped like the cut.



Bar, ½ size.

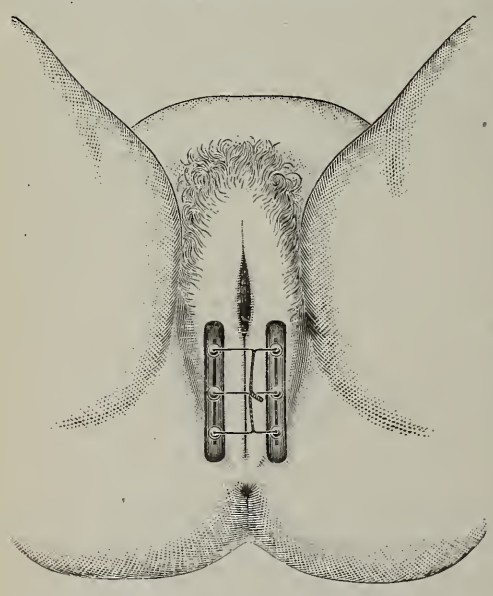
The operation is begun at the bottom of the tear in the vagina. With one or two fingers in the rectum, I make a little slit at the lower point, and denude subcutaneously all the tissue that has been torn. I do not know how far up I go—it may be two inches, or even nearly the length of the finger. This depends altogether upon the extent of the tear. The important thing is to get rid of all the scar tissue. Unless this is done, good union will not be secured. After denuding up the proper distance, the scissors are turned to the right and to the left, and each side denuded. Then, with four cuts of the scissors, the loosened cicatricial tissue is removed. A denudation of this kind freshens the torn perinæum as I think no other method does. The first stitch near

the bottom of raw surface is passed three-forths of an inch from the cut portion, buried in the tissue of the whole distance, and comes out at the same distance on the other side. The needle is then threaded with silver wire and withdrawn. The second stitch is put in in the



Surface denuded, and stitches in place.

same way. The third stitch is started in the skin like the others and three-fourths of an inch from the edge of the cut, carried along just under the edge of the de



Operation finished, and bars in place.

nudation and the whole way around. This is the most important stitch of all. It was the idea of the late Albert H. Smith, when one of the physicians-in chief at the Nurses' Home some years ago. The stitches are buried throughout, and only three are used in the operation. All that is necessary is to bring them out in nearly a straight line.

The wires are slipped through slotted rubber bars, on each side, and shot-clamped on them. After the shot are clamped, the ends of the wires are twisted over the median line, and the ends passed through a piece of catheter. In twenty-four hours there is swelling and a certain amount of inflammation. I can cut the wires off close above the shot, and this at once relieves the tension and the pain. Any desired dressing may then be applied, if it is thought advisable to use any dressing.

What are the advantages of this operation? In the first place, you have but three stitches. I think that probably every gentleman has seen perinæa operated on where there has been deep quilting, and have seen the tissue slough out because the circulation has been so interfered with that nutrition could not be maintained. These three sutures interfere very little with the circulation, and they hold together the deep parts of the wound, which is very important. When inflammation takes place, you cut the wires over the shot, the bars spread and relieve the tension and prevent any tendency to sloughing, while still supporting the parts.

After the wound is closed, you may take a piece of catgut and whip up the edges in the vagina, and along the line of the raphé. This is not necessary unless we want to make a very perfect job. The operation is easily and quickly performed. I have never timed myself, and never tried to do the operation in a hurry, but I accidentally found out how long it takes.

On one occasion, in 30 minutes from the time I began I had operated upon two cases, and this included the time necessary to put one patient under ether from perfect consciousness to unconsciousness. The denudation is accomplished in four or five minutes.

This is a different operation from that in which denudation is made in curved lines, and where another operation is required for any existing rectocele. The operation described above will include also a rectocele. It is better than another popular operation, which does not restore the triangle which nature made, but makes a beautiful skin-flap, which looks well from the outside, but affords no support.

I do not claim any thing novel. It is simply a combination of ideas that I have picked up from time to time. In regard to the results of the operation, it is a rare occurrence to have a failure.

Discussion.

Dr. J. Price.—There are a few points about which I should like to speak in connection with this procedure and like procedures. As Dr. Da Costa has said, this is an old operation, and is illustrated in all the books. It is the old operation upon the posterior wall, and has the merit he referred to, of, in many cases, making a superficial or skin perinæum. The principle of suturing described is one not adopted in any other branch of surgery, and Dr. Da Costa would himself not apply this principle in any other portion of the body. He says that sometimes he denudes a distance of three inches. In no other part would he approximate such a surface with three sutures, and three sutures will not close it.

A word in regard to the denudation. He speaks of

four clips of the scissors—the button-hole, the central and the two lateral. In many cases it is impossible to make such a denudation. You will button hole the flap many times. That was the trouble with the Smith and Jenks operation. It is difficut to make a clean denudation in the midst of scar tissue by such a method.

One of these illustrations shows what takes place in many perineal tears. The skin perinæum side is not harmed; but if you place your finger in the sulcus on one side, you will find a sense of resistance which is absent on the other side. The sulcus is a deep one, and is a lateral tear. As has been remarked by Dr. Deaver, "It is for all the world like the lateral cut for stone." In such a case the procedure is almost a unilateral one to bring up the pelvic floor. It is just such a state of affairs that Emmet had in view in his classical operation for the restoration of the pelvic floor or diaphragm, and he has most beautifully succeeded.

In regard to the use of this needle. Dr. Da Costa has referred to the 53 cases reported by Dr. Thompson of the Columbia Hospital; but he lost one or two from tetanus, and this bayonet was at the bottom of the tetanus. I look upon this needle as wholly unjustifiable in any surgery. No man has a right to have such a thing among his instruments. I am surprised that more do not die from such a stab, including, as it does, incongruous masses of tissue, skin, fat, muscles, vessels and nerves. I remember while a student of seeing a death from such a stab. I use the smallest sewing-needle possible.

These procedures are very old and are illustrated in all the old works. I consider all two-or-three stitch methods of closing the perinæum as emphatically imperfect procedures.

Dr. John D. Da Costa.—What Dr. Price has said in regard to one of these illustrations has nothing to do with the subject under discussion. He refers to a tear of the vagina, which has nothing to do with a tear of the perinæum. If there is a line of cicatricial tissue on one side, we do not need to denude both sides to repair the condition. It is a simple matter to remove the scar tissue and sew it up, as in any other surgical operation.

I am sorry to hear this tirade against this needle. Some very able men use this needle and they get very good results. Albert H. Smith, who did a good deal of gynæcological work, used a needle much like this. One of the most successful abdominal surgeons in Philadelphia uses a needle much like this. Surgeons in all branches of surgery use needles very like this—either a little more or a little less curved. One who came from Europe a year ago showed me a long, curved needle which he brought with him and said it was Tait's needle. It was pricisely similar to one which I have had in my box for years for use in complete laceration of the perinæum. This is only the Baker-Brown needle modified.

I do not know that Dr. Price has said anything against this operation. He has talked a good deal about the needle and about a tear that does not apply at all. I can only say that despite his fears the operations are almost uniformly successful. Any one who can do the ordinary quill operation can do this. After analyzing the various operations eight years ago, I found that the best results were obtained by the old-fashioned operation. The quill operation, however, made a V-shaped sinus to the bottom of the wound, and sometimes caused a great deal of trouble; and it was to overcome this objection that I substituted the hard rubber bars with the wires running through.

[TO BE CONTINUED.]

SELECTIONS.

Diabetes Insipidus—Cure.—"A case of Diabetis Insipidus with Favorable Termination" was the subject of a paper read before the Cincinnati Medical Society by Dr. Phillip Zenner, of the Medical College of Ohio. He reported the case for the encouragement it might give in the management of similar cases, and for the therapeutic suggestions it may afford. The case was that of a boy 12 years old. He passed large quantities of urine, which had the appearance of distilled water. It contained neither albumen nor sugar, and had a specific gravity of less than 1001. Incontinence of urine compelled him to wear a rubber bag, and in this way the urine was measured, and found to be about 37 and one-half pints in 24 hours. The treatment consisted of electricity, antipyrin and valerian. Antipyrin was given in 7½ grain doses three times a day, and powdered valerian root, one-half teaspoonful three times a day. The electrical treatment consisted of the application of the galvanic current to the cervical sympathetic and to the spine, especially over the region of pain. The current used was of moderate intensity, the applications being made daily the first month, subsequently two or three times a week, each of about 10 minutes' duration. The improvement in the polyuria and the condition of the bladder was exceedingly slow, while other symptoms were ameliorated more rapidly, the appetite soon returning and the pains entirely subsiding in a month or two. The improvement, though so slow at first as to be scarcely noticeable from week to week, towards the last was very rapid.

He did not suffer from thirst, and drank very little. The specific gravity of the urine finally became normal, and he could hold his urine all night. As recovery in diabetes insipidus is extremely rare, especially in cases of a year's duration, it is very reasonable to attribute the cure, in part at least, to the therapy. He thinks all three remedies had a hand in the cure.—*American Lancet.*

Stomach Washing in Infants.—Since this mechanical treatment of gastric troubles in infancy and childhood was introduced by Epstein in 1880, it has been carried out systematically by but few physicians. These

few, however, speak most highly of it. Over 5000 children have now been treated in this manner in Epstein's clinique with very gratifying results. Seibert has practiced it largely in New York, and recommends it in three different conditions—(1.) The dyspepsia of infants, with regurgitation of food after each meal. These are generally cured by a single washing. (2.) In acute gastric intestinal catarrh or cholera infantum. If the cases are got hold of early enough, the results are most satisfactory. Instead of depressing the children, the treatment seemed to have a stimulating influence. (3.) In cases of chronic catarrh of the alimentary tract. These require more frequent washings. All the cases of this series were treated with complete success, though some were very severe and of long standing. The principle of this treatment is that thus the poisons formed in the stomach by retained masses of curd or other food are mechanically diluted and washed out of the body. Only plain warm water without any medicaments is used. The washing is continued, using small quantities of water at a time, until it returns quite clear. *Modus operandi*—A soft, "velvet-eyed" catheter, with tubing attached, is introduced into the stomach. The tube in then attached to the pipe of a glass douche case; about a teacupful of warm water is then passed into the stomach, the tube detached, and the water allowed to run out again, the process being repeated as often as necessary. In chronic cases a few small doses of calomel are given, subsequently followed by an enema. Plain barley water is the only food given for twenty-four hours, and then a gradual return to milk is allowed.—*Arch. of Pediat.*

Tongue-Tie.—Dr. Tassius, of Berlin, in a communication to the *Memorabilien*, makes himself responsible for some novel views on the propriety or otherwise of incising the frænum of the tongue. He says in his introductory remarks that the little operation has often been performed without considering that other and deeper causes, especially those connected with the general development, may be accountable for the faulty development of speech than the mere size of the frænum. He considers that this tiny and admirably constructed organ is a correct regulator of the various movements of the tongue, and that, if the same be too hastily interfered with, the more delicate movements may be for ever destroyed—a momentous fact for those destined to become public singers. He advises his medical brethren, therefore, to proceed very cautiously, and not to operate at too early an age, as much improvement may result from the advancement of general development. Only in those cases in which the frænum is so abnormally large and tendinous as to cause a fissure in the tip of the tongue may the incision be made at once, but it should be calculated almost mathematically what proportion the depth of incision should bear to the fissure. The author deprecates, therefore, the use of scissors, as not to be depended on, but advocates the employment of a small knife, the incision to be made from below upwards. Where the frænum is of a fleshy character, and it is, consequently, certain that the child will never gain distinction in singing or elocution, there is, according to Dr. Tassius, no cause at all for immediate interference, unless the deformity causes a real impedient. It is far better to leave such cases—at any rate, for some time—entirely to the *vis medicatrix naturæ.*—*Lancet.*

Death from Nicotine.—A case of excessive cigar smoking, followed by death, is given by Dr. B. W. Richardson in *Aesclepaid* for May. A man, aged 35 years, of slight build, much worried by the cares of business, indulged in smoking almost continuously for twenty-four hours, and taking nothing but a little brandy and water. Within a period of twelve hours he smoked fourteen large strong cigars and forty cigarettes. He became prostrated, excited and tremulous, with loss of muscular power in lower extremities. At this point, the author was called in. Supporting treatment was ordered, but without avail; the loss of muscular power increased and extended to the upper part of body. Unconsciousness and convulsive symptoms set in and increased until the evening, when death took place by asphyxia, through accumulation of fluid in the bronchial passages. The author traces these conditions to nicotine poisoning. He concludes by stating that if he has to deal with another case of this nature, he will try the effects of transfusion.—*Jour. Am. Med. Ass.*

Instantaneous Cure of Whooping Cough.—The instantaneous cure of whooping cough was attained by Dr. M. Mohn as a result of accidentally observing that the disinfection of the sick-room of the whooping cough patient by sulphurous acid, caused the disappearance of the paroxysm with a rapidity bordering on the marvelous. The patients are freshly clad in the morning, and placed in another room, in which they remain during the day. Meanwhile, 25 gm. of sulphur is burned in the sick-room to each cm. of space; and after the bed clothing, garments, etc., have been properly spread out, and the sulphurous acid been permitted to permeate the air for five hours, the patient's return to their disinfected sleeping-rooms in the evening, and are cured of whooping-cough.—*Archiv. de Pharm.*, 1889.

A Sweet Graduate.—One of the "sweet graduates" in a neighboring town, says the Sumter County, Florida, *Times*, read an essay on physiology, in which she said: "The human body is divided into three parts, the head, the chist and the stomick. The head contains the eyes and brains, if any. The chist contains the lungs and a piece of the liver. The stomick is devoted to the bowels of which there are five, a, e, i, o, u, and sometimes w and y."

ORIGINAL ARTICLES.

ABERRANT SEXUAL DIFFERENTIATION.

BY G. FRANK LYDSTON, M D., CHICAGO, ILL.

The subjects of imperfect or aberrant sexual differentiation are much more numerous than is generally supposed, but fortunately the majority of cases are either slightly marked or of little practical importance as regards their physiological and social relations.

Time was when certain marked cases of physical deformity were of vital importance to medical jurists and hermophroditism, so-called, received considerable attention on the part of authorities upon jurisprudence—thus in England, where the law of primogniture exists and the male is therefore relatively so important a factor in the body social, the traditions of law upon hermaphroditism still prevail to a certain extent.

As our knowledge of physiology and morphology has advanced, however, the so-called hermophrodite has not only decreased in numbers, but is no longer of such vital importance. The principal feature of such cases nowadays is the question of impotence on the one hand and sterility on the other.

Hermophroditism in its literal sense implies a mingling of the physical and functional characters of both sexes, the crucial test being at the present day the existence of a more or less perfectly formed testicle and ovary in the same individual. In this sense there is, as far as I am aware, not a single case of hermophroditism on record. I am aware that such are described, but I do not admit their authenticity. It is admitted, however, that cases are occasionally seen which require great diagnostic acumen for their differentiation. An illustration of this occurred in Paris several years ago. A case coming under the observation successively of Guyon and Fournier was in a lengthy opinion positively asserted to be male by one, and quite as positively pronounced a female by the other of these eminent gentlemen.

Many cases occur in which a diagnosis is impossible until the age of puberty, when certain sexual proclivities, menstruation, the development of beard, changing voice, etc., as the case may be, decide the question of sex. It is a fact that in marked cases of so-called hermophroditism, the afflicted person not only has not a mixture of male and female organs, but is practically a neuter, being incapable of exercising the functions of either sex. When, however, the subject of genital malformation is also a sexual pervert, appearances may indicate an apparent commingling of the functional capacity of both sexes. A case which came under my own observation aptly illustrates this: A "hermophrodite" mulatto cook in my neighborhood not only had intercourse with women, but was in the habit of enticing young lads into attempting connection. An endemic of gonorrhœa among the lads of the locality led me to investigate the source of the disease and readily traced it to the negro hypospadiac.

Aberrant sexual differentiation is not always physical but may be functional, *i. e.*, dependent upon imperfect differentiation of sexual affinity. As sexual affinity is but a form of "hunger" (Clevinger, *op. cit.*) or chemical affinity, sexual perversion might naturally be expected to result. It may be seen therefore that pæderasts, urnings (Caspar, *op. cit.*) and other sexual perverts are really akin to epispadiacs and hypospadiacs.

The subjects of imperfect sexual differentiation may be classified as follows:

1. Imperfect differentiation of sexual affinity without defective structure.	Pæderasts, Urnings. Subjects of bestiality. Affinity of the female for her own sex.
2. Defective (*i. e.*, imperfect differentiation of) structure.	*a.* Simple (*i. e.*, with normal sexual appetite). *b.* Complex (*i. e.*, with perverted sexual appetite).

Under this head come cases of hypospadias and epispadias, and certain cases of rudimentary condition or absence of uterus, ovary, testicle and penis.

In an old work upon jurisprudence (Guy, *op. cit.*) cases of sexual peculiarity (*i. e.*, physical malformation) are classified as follows:

1. Male individuals with such unusual formations of the generative organs as in many respects to resemble the female.

2. Female individuals with such unusual formation of the same organs as to resemble the male.

3. Where a mixture of the sexual organs of both sexes is exhibited without either being entire.

It is obvious that there are certain acquired conditions which would fall under the above classification which would not be true cases of aberrant sexual differentiation; *e. g.*, a prolapsed and hypertrophied uterus has been mistaken for a rudimentary penis, and females thus afflicted have been known to copulate with other females. An hypertrophied clitoris may be mistaken for a rudimentary penis.

The importance of caution in deciding the sex in cases of genital malformation is aptly illustrated by a comparatively recent case occurring in this city. In this case society was electrified by the discovery that a supposed young lady who had been visiting about and sleeping with *bona fide* young lady friends, was a boy. The first intimation of the truth was the development of a pronounced beard with a bass vocal accompaniment.

There was considerable anxiety for a time lest the supposed girl had discovered his meritorious qualities prior to their detection by others. He naively confessed that "it always did make him feel funny to sleep with the girls."

The assertion that certain cases of sexual perversion

are akin to epispadias and hypospadias and the result of imperfect differentiation, may seem a trifle far fetched but I hold to the opinion that, even when the differentiation of sex is complete from a gross physical standpoint, it is still possible that the receptive and generative centers of sexual sensibility may fail to become perfectly differentiated. The result under such circumstances might be, on the one hand, sexual apathy, and upon the other, an approximation to the male or female type as the case may be. Such a failure of development and imperfect differentiation of structure would necessarily be too occult for detection from a physical standpoint by any means of investigation at our command. It is, however, only too well recognized by its results and is often responsible for disgusting cases of sexual perversion which we are prone to attribute to moral de pravity. I have elsewhere elaborated this point, and upon the relation of reversion of type to sexual perversion. (*Philadelphia Medical and Surgical Reporter*, September 7th, 1889). Thus a failure of development is equally responsible for certain cases of sexual perversion and instances of hypospadias and epispadias.

Cases of gross physical aberration of genital structure are not difficult to account for, as far as the modus operandi of their formation is concerned, but their cause is not so readily explicable. How far maternal impressions enter into the causation of genital deformity is a question upon which it is to be hoped much light may some day be shed. There is evidently an exhaustion of formative energy before complete fusion of the two lateral segments, of which the embryo is practically composed.

Defective genital formation bears the same relation to this exhaustion of formative energy, as does crania bifida, spina bifida, etc. It is obvious that the degree of deformity depends entirely upon the period at which developmental progression ceases. As far as appearances go, we would naturally conclude that differentiation does not cease at a very early period in the life history of the fœtus, else true hermaphroditism would not only occur in reality, but would be frequent.

Geoffroy St. Hiliare, one of the older writers, mapped out a very elaborate plan in explanation of hermaphroditism in a work especially devoted to that subject. He divided the generative apparatus into a series of portions or segments, three in each lateral division. The upper set comprised the testes and ovaries, the middle the womb, prostate and vesiculæ seminalis, the lower the penis and scrotum, clitoris and vulva. According to him, therefore, there might occur any number of varieties of hermaphroditism, according to the combination of defective structures. This scheme was defective because of the fact that, in spite of all appearances to the contrary, differentiation never falls short of determining one or the other sex.

The simplest plan for the explanation of genital deformities and anomalies is to remember that the fœtus practically develops in two halves and that any failure of union at the genital furrow will result in a greater or less degree of aberration of genital formation.

The relation of aberrations of genital formation to sterility and impotence is very important. Impotence does not exist in the female unless there be atresia or complete absence of the vagina. Almost any aberration of the structure of the ovary or uterus will, however, produce sterility. In the male impotency is more apt to result than sterility, as serious deformity may prevent erection, or sufficient development of the organ to permit intromission. No matter how great the deformity, however, the individual may be fruitful if circumstances be favorable, as long as the testicles are functionally perfect.

In determining the sex of alleged hermophrodites, the following points require consideration:

1. The character of the voice.
2. The development of the mammæ.
3. The growth or absence of beard.
4. The form of the shoulders, hips and waist.
5. The presence or otherwise of the menses or vicarious discharges.
6. The character of sexual desire. (In respect to this point, the occasional coexistence of sexual perversion with genital deformity should be given its due meed of consideration. Thus in a case in which difficulty of diagnosis existed a perverted sexual affinity for the same sex might mislead the physician.)
7. The presence or absence of rudimentary or perfect?) testes and ovaries.
8. The form of the supposed clitoris or penis, the method of attachment of its prepuce and the absence or presence of perforation.
9. The presence or absence of the hymen (rudimentary), nymphæ, labia majora or bifid scrotum, as the case may be.

In cases of doubt it is safest to regard the individual as a female until time and pubescence have settled the question.

The cases of imperfect or aberrant sexual differentiation included under the head of sexual perversion, are obviously more difficult of study than those in which the aberration is of a purely physical character. This is especially true regarding the Sapphic love, or sexual affinity of female for female. That such cases are frequent I am convinced, but they are extremely difficult to trace; the confessional of the family physician doubtless might offer evidence of a clinical character, but the physician is very chary of airing the short comings of his patients in this particular direction. The existence of this aberrant sexuality can only be explained by the theory of reversal of type.

In the case of the male, instances are so common that the subject is decidedly trite. It is not only charity, but a sense of justice and a desire to lessen the stigma upon human nature, that impels me to include cases of sexual perversion under the head of aberrant sexual differentiation and to attribute the condition to perverted or imperfect evolutionary development on the one hand, and a reversal of type on the other.

Opera House Block.

CONTAGIOUSNESS OF TUBERCULOSIS.

BY WM. PORTER, M. D., ST. LOUIS,

Chairman of a Committee Appointed to Report to the Mississippi Valley Medical Association at Evansville, Ind. 1889.

GENTLEMEN:—A year ago, when I was appointed a a member of the Committee to report upon the "contagiousness of tuberculosis" I fully expected to be able to present to you a condensation of all the writings upon this subject up to date.

Those of you who have noted the current medical literature for the last twelve months, will agree that such a purpose could not now be carried out in the time to which our papers are wisely limited.

Moreover I believe that a free discussion of this subject will profit more than the presenting of even the most exhaustive report, therefore I will not embarrass the former by attempting the latter.

The choice of the term "contagious" is not a happy one, and yet it has a conventional meaning well understood. I shall here use it as meaning transmissibility. The word "portagious" suggests a thought which should always be kept in mind in our care of phthisical cases, which is that tuberculosis is a disease which can be carried; that the specific elements are portable. This, if we were to hold to the exact use of scientific terms, is more acurately descriptive of that feature of tuberculosis under discussion, than is the word contagious. Let us to-day, however, employ these terms as expressing the same idea, and thus avoid confusion and misunderstanding.

The careful reader of to-day cannot but notice the almost entire unanimity of opinion as to the possibility of the contagiousness of tubercular disease, and it is not so much to argue this proposition, as to speak of the manner of transmission, that I will claim your attention.

In all experiments made to determine the transmissibility of tubercle, it is well to accept the presence of the "tubercle bacillus" as a definite proof of the existence of tubercle. As I have elsewhere said, I am not fully convinced that it is always the cause or as many able writers say, the only cause, but even this may some time be demonstrated. At present, and I think this will suffice for our purpose to-day, I believe that if the bacillus is not the cause of tuberculosis, it is at least the result.

The causative relation of the bacillus to tuberculosis is not, however, our theme, and lest we fall into profitless discussion by the wayside, permit me to return to the subject proper, the question of contagion.

At the outset we are met with the question, can tuberculosis be directly inherited? Or to state it more plainly, can a new born child have in its tissues bacilli transmitted directly from the father or mother?

We all will admit that a child may inherit a peculiar conformation of chest or a constitutional predisposition which may favor in after years, the development of conditions favorable to tubercular invasion, but whether the fœtus may be infected through the ovum or spermatozoa is doubtful ,though such infection may probably be accomplished through the placental circulation.

Johne claims to have proven placental infection to exist in the cow; and Baumgarten as well as some others affirm that a child may be born with bacilli tuberculosis in its tissues, which may remain latent for years, or even during the lifetime. Landouzy and Martin have caused tuberculosis by inoculating animals with the placenta of tuberculous patients.

There is considerable evidence, therefore, to show that tubercle may be directly inherited, from the mother but never from the father. And the great probability is, that instances of direct inheritance of tubercle are very rare indeed.

One such instance however, was in my own practice during the past year. A lady patient, far advanced in pulmonary tuberculosis gave birth to a child which died in seven months with well defined tubercular disease.

Leaving the solution of the problem of direct inheritance of tubercle to the future, let me offer two propositions which, I believe, are susceptible of demonstration, and if so, are of greatest practical value in their relation to human life.

1. The products of tubercular disease may be carried from a diseased human subject to one apparently healthy, in whom, as the result of such transmission, all of the well known processes of tuberculosis may follow. In such cases the respiratory tract is generally primarily affected.

2. Through the media of meat and milk, tuberculosis may be transmitted from diseased animals to man. In these cases the alimentary tract is first invaded.

Other methods of transmission are recognized by leading investigators, but those two being the most important, will fully occupy our time.

The proposition that tubercular products from a diseased individual may be engrafted upon and infect a non-tuberculous subject through the respiratory tract, is not only of the greatest interest, but of first importance.

I need not refer to many of the numerous experiments that have been made upon animals to determine the possibility of acquiring tuberculosis through inhalation of air loaded with particles of diseased matter. The researches of Villemin and Chauveau twenty years ago, were demonstrations of the fact that tubercle could be conveyed by inoculation. The objections made by Sanderson and Fox that tubercular conditions could be produced by inoculation with non-tubercular materials has, I think, been well answered by Martin, of Paris, who, from numerous experiments, concludes that after inoculation with tubercular matter, general tuberculosis may be produced, and the virus acquires increased potency when inoculations are made in series of animals of the same species. On the other hand the inoculation of non-tuberculous matter may produce tubercles which however do not, when inoculated, give rise to general tuberculosis. and this virus after several terms of the series, seems to lose the power of causing even a charicteristic local inflammation.

If we accept true the statement that tuberculosis

may be conveyed by inoculation, we are prepared to receive the further statement that it may be transmitted by the inhalation of the products of the disease. There is ground for the belief that many of the instances of acute infectious diseases which have their gravest manifestations in the air passages are cases of inoculation; in diphtheria, for instance, where the mucous membrane denuded of its epithelium, becomes a suitable place for the reception and propagation of the specific germs, or in erysipelas of the upper air passages where probably a similar phenomenon takes place, and possibly in scarlet fever and as some European writers think, in cases of specific pneumonia.

What is the evidence to warrant us in concluding that tuberculosis may be contracted in this way? First the experiments upon animals by Tappeiner in 1883, who found 17 tuberculous animals out of 18 that had been made to inhale tuberculous sputa. Then the results of Koch's trials who found within 28 days tubercles in the lungs of guinea-pigs that had been made to inhale material from phthisical cavities.

The experiments conducted by Cadeac and Mullet showed that while the expired air from tubercular products gave negative results ,the inhalation of air which contained particles of dried sputa from the same patients produced tubercle in two out of twelve of the guinea-pigs employed.

Some experiments of my own (Portagiousness of Phthisis, *Jour. Am. Med. Ass'n.*, March 1, 1888.) which need not be given in detail, showed that where tuberculosis was produced in a guinea-pig by inoculation, it was possible to infect a previously healthy animal by causing it to inhale the air from a close box in which the diseased one was confined.

When we come to a practical study of tuberculosis in the human subject, the evidence of its transmissibility is I think conclusive. I need not here detain you by citing individual cases, in proof of this assertion, for probably each of us will remember instances where if there was not actual demonstration of the contagion of tuberculosis, there was at least circumstantial evidence strong enough to deeply impress us.

Aggregated investigations are always more valuable than isolated instances. We find that the Collective Investigation Committee of London, received replies to inquiries, from 261 physicians in active family practice affirming the proposition that phthisis may be communicated from the sick to the well. In these answers many cases were related which seem to leave little room for doubt.

In this country the pathologists of the New York Board of Health have even gone so far as to distribute published rules for the prevention of consumption, based upon the knowledge of its contagious nature.

At a meeting of the Paris Academy of Medicine, M. Villemin read a report of the special committee appointed by the congress for the study of tuberculosis last year, which it was proposed to publish, with the object of instructing the laity as to the nature of the disease and the best means of avoiding contagion. The report calls attention to the fact that pulmonary phthisis is not the only form in which tuberculosis manifests itself, but that many cases of pleurisy, peritonitis, meningitis, and bone and joint diseases, are often tuberculous. The report insists upon the contagiousness of the disease, and refers to the various ways in which the bacillus may gain entrance into the body. Since the sputa of phthisical patients usually contain the bacilli in large numbers, special care should be paid to the immediate destruction of all expectorated matters.

In a paper by Dr. J. E. Squire before a recent meeting of the London Epidemiological Society, the statement was boldly made, that the discovery of the bacillus tuberculosis allows us to place phthisis in close relation to the class of infectious cases, toward the control of which, preventive medicine has already done so much.

Dr. Cornet in an excellent paper read before the Berlin Medical Society, only voiced the opinion of many other writers when he said the chief danger of contracting phthisis by contagion, lies in the dried sputum which is often turned into respirable dust.

Dr. Lawrence Flick in a paper read before the Pennsylvania Medical Society last year, says "contagious diseases are dependent upon a diseased germ and cannot be contracted except through the medium of that disease germ. Every case is dependent upon some other case, and no case can spring up of itself." He then endeavors to show by a careful topographical study of phthisis in the fifth ward of the city of Philadelphia for a period of twenty-five years, that consumption observes this law.

Few physicians are ready to accept such advanced views as these, and yet a careful study of Dr. Flick's essay will show good grounds for his assumption.

Objectors to the doctrine of the contagion of phthisis often quote the statistics of the Brompton Consumptive Hospital which show the fact that the medical attendants and nurses at this famous institution have been singularly free from tuberculosis.

Instead of arguments against the probability of contagion, are not these facts, of which you are all aware, evidences of the value of prevention? Where could we find better hygienic conditions than in such a hospital, and it is to just such conditions that the advocates of contagion look for relief. If the fact that the resident physicians and nurses at the Brompton Hospital seldom become victims of tuberculosis, is a proof of the non-contagiousness of the disease, then by the same process of reasoning can we prove that diphtheria and even cholera are not contagious.

A most interesting fact in keeping with the idea of the transmissibility or phthisis is that localities once famous for freedom of tubercular disease may in time acquire a doubtful reputation as health resorts for phthisical patients.

Dr. Benjamin Rush wrote that consumption was unknown among the North American Indians in the early history of the country and very infrequent among the early settlers of New England. A hundred years ago

the climate of New York was thought to be curative in cases which had acquired phthisis in the old world. Afterward the level praries of Illinois, and since then the mountains of Colorado and the salubrious atmosphere of California have been the Eldorados of the victims of tuberculosis.

That there is much in the curative influence of climate, I firmly believe, but the point I wish here to make in accord with the idea that tubercle is transmissible, is that a place or a people once free from the ravages of tuberculosis, may, by being brought into association with tuberculosis, and by ignoring sanitary precautions, acquire conditions needful for the spread of the disease.

I wish to emphasize the idea, that when a certain locality becomes famous as a resort for consumptives, the strictest care should be taken by those in authority to enfore all that is now known of sanitary and hygienie laws to prevent possible transmission of the products of the disease. Who has not seen muco-pus left by the victim of tuberculosis, slowly drying on the grass or gravel in front of the summer hotel, needing only time and a gentle breeze to be wafted in broken doses, possibly even into the sleeping chamber of the unconscious and the unguarded. We vent our indignation upon the unlucky wight who drops the orange rind or banana peeling upon the side walk, but fail to notice him, who himself the victim of the dread diseaes,unconsciously or ignorantly places a greater danger in his neighbors' pathway.

The statement has been made by Flick and others, that patients with phthisis have greater immunity from other contagious diseases. Dr. Welch says that having seen upward of 5,000 cases of small-pox at the Philadelphia Municipal Hospital, he does not remember one who had well marked phthisis. Dr. Longstreth, pathologist to the Pennsylvania Hospital, in twenty years has never found consumption in an autopsy for typhoid fever.

Thus it appears that the study of tuberculosis as a contagious disease, is each year presenting new and interesting conclusions and certainly we have reason to hope that the line of investigation so largely directed by Koch's discovery may ere long bring about results which will be of greater practical advantage than any with which we are now familiar.

Second. Having gone somewhat hurriedly over the grounds upon which are found the theory of the transmission of tuberculosis from man to man, let us see what reason there is to believe that it can be carried from animals to man.

You are all familiar with the unanimous conclusions of the Congress on Tuberculosis held last year in Paris, which was in support of the idea that tuberculosis is contagious and that there is positive danger to the human race from the consumption of the milk and flesh of tuberculous animals. It was proven by numerous experiments that animals fed upon diseased meat were exceedingly liable to become tubercular and then it was demonstrated by Carmil who had made a special study of the subject, that the tubercular bacillus as found in such animals may penetrate the unbroken mucous membrane of the respiratory and intestinal tracts.

M. Moule and also M. Cagny had observed that domestic fowls were often the subjects of tuberculosis, the disease being found first in the abdominal organs. This I believe to be a most timely warning against a danger next to that of bovine infection. Some of you may have seen the barnyard fowl destained for early enrollment on the menu card, picking over the debris from tuberculous patients who have been attracted by the well known reputation of the place, for good water, pure air, and the best of food. It is not pleasant to think of such things, but unless we think of them we cannot remedy them.

A learned paper by an honored member of this association, Dr. J. A. Ouchterlony, was read before the Kentucky State Medical Society, in which he expressed his conviction that there could be no security from tuberculosis so long as tuberculous meat and milk are used. "The disease is contagious, infectious, and not congenital. It is transmissible, especially through the alimentary canal and respiratory tract. Rabbits kept near tuberculous patients contract the disease in 27 days. Rabbits suspended in cages so as to breath the air exhaled by tuberculous cattle contract tuberculosis. The lungs are the primary seat of the infection. It may be contracted through the integument, mucous membrane, abraided epidermis, wounded and abraded surfaces. Tuberculosis in dumb animals is identical with tuberculosis in man. Transmissibility to other species is very frequent."

In a recent paper on the "Communicability of Tubercle Through Cows' Milk" Dr.Louis Parks of the University College, London, says "whilst not denying that the tubercular virus may find other means of reaching the digestive tract than through unboiled cows' milk, it appears to me that there are no sufficient safeguards in the management of town dairies to warrant us in assuming that milk from cows in an advanced stage of tuberculosis has no chance of being mixed with the milk of other healthy cows. In every dairy of any size there will probably be tubercular cows, some of them perhaps, with tubercular deposits in the udders, and, as it is the common custom with dairymen to mix together the milk yielded by different cows, it is not too much to assume that tubercle bacilli may be widely distributed in the milk supply of any town. It has been said that the tuberculosis of cattle is not the same disease as the tuberculosis of man, and that the absence of any proof of the human variety having ever been dependent upon ingestion or inoculation of the virus of the bovine variety tends to strengthen that belief. To this it may be replied that the bacilli of bovine tuberculosis are identical—according to all bacteriological methods at present known—with those found in tubercular formations in the organs of man, and that although the disease presents anatomical differences in man and cattle, these differences may be explained as being due to differences of soil in the human and bovine tissues, the bacilli ingraft-

ing themselves in those tissues which present conditions most favorable to their growth and development. Secondly, absence of proof may only mean want of observation or recorded data, and cannot be held to imply that at no future time will satisfactory evidence of the dependence of the human disease upon a bovine source be brought to light."

If time did permit I would quote at length from the paper of Dr. Paul Paquin, presented at the Missouri State Medical Society last May. He asserts that "the milk of tuberculous cows especially those having lesions in the mammary glands (a common thing in grave cases by the way) has been found by Degive, Bouly and Mo card, of France, Bollinger in Germany, Bang in Sweden, Harsten in Belgium, Lydtin in Switzerland, Fleming in England, and a few American pathologists, to be capa ble of producing tuberculosis. I myself have found extensive tuberculous lesions in the mammary glands of milch cows; and I have known of some cases of tuberculosis induced by bacillized milk."

The important question for us as physicians, is, can the danger of transmission be averted? So far as our present knowledge goes, we might answer, not entirely, but if there be value in the carefully formed conclusions made from the scientific work of the last decade, much may be done to limit the number of victims of tubercu losis. We may not all be ready to fully endorse the statements authorized by the New York Board of Health, that tuberculosis is a distinct disease, that it is not directly inherited, and that it is acquired by the direct transmission of the tubercle bacillus from the sick to the healthy, usually by means of the dried and pulverized sputum floating as dust in the air. For myself, I am convinced that in this direction is the safest path, and as no harm can come from excessive care regarding food and sanitation, I am willing to advise such care, though it seem to be excessive.

From experiments made upon animals and observa tions upon the human species, it is plain that much of the danger of contracting tuberculosis lies in the inhalation of air loaded with tuberculous sputa. Surely the danger can to a large extent be met by insisting that tuber culous patients should as far as possible use a cuspidore in which is a solution of bichloride of mercury at least 1 to 1000, for it has been demonstrated that the bacillus can live in solutions of less potency.

Cuspidores and cloths which are used to receive the expectorated material from diseased lungs, should as far as possible be kept moist and the bed clothing thoroughly freed from all power of contamination. There is nothing which demands correction more than the uncleanly and unsafe practice which many follow who have care of consumptive patients, of placing newspapers on the floor by the bedside upon which the expectorated masses are gathered and dried for free distribution in the household.

The careful disinfection of the room which a tuberculous patient has occupied is a matter of detail, not to be overlooked by the medical attendant.

So far as protecting the public against food containing tubercular products is concerned, it can only be accomplished by thorough inspection. It is certainly the duty of each physician who is himself satisfied that such danger exists, to endeavor to impress the public mind with the importance of proper legislation upon this subject.

If we are convinced that tuberculosis is contagious, and will but work up to our convictions, it is possible that the first step will then be taken to place this much-dreaded disease under the same treatment as in small-pox and the once all-distroying plague.

Although none of us may be willing to ignore the agency of individual tendency, physical formation and other conditions as predisposing factors in the causation of tuberculosis, yet, as we get away from the idea of heredity and approach the more tangible view of transmission, the future is brighter with promise, and will, I have no doubt, be more abundant in practical result.

REPORT ON PROGRESS.

OPHTHALMOLOGY.

BY R. L. THOMSON, M.D.

Foreign Body in the Orbit.

Dr. Marsh, of Troy, N. Y., reports a case in the *N. Y. Med. Jour.* in which a piece of steel weighing fifty-one grains, entered a patient's orbit, between the globe and external canthus of the eye, and remained in the cavity for nearly sixteen months, without causing irritation. The sclerotic was not broken, but the greater portion of the retina was detached and became atrophied. No suppuration was found on removal of the foreign body. Immediately after the receipt of the injury, several surgeons made a thorough search for the piece of steel, by the use of the probe, but it could not be found. At the time of reporting the case Dr. Marsh thought he should have enlarged the conjunctival wound and explored the orbital cavity with his little finger.

Paralysis of the External Ocular Muscles.

An uncomplicated case of progressive ophthalmoplegia externa is reported in the *Boston Med. and Surg. Jour.* The child's eyes seemed perfectly natural, till in his third year, when ptosis began to be gradually developed, and it slowly increased till the boy was nine years of age. He is now thirteen and no appreciable change has taken place during the past five years. By the use of the occipito-frontalis muscles the boy can expose the lower half of the right pupil and the lower third of the left. Vision and accommodation were unimpaired. The patient did not complain of diplopia, though when his attention was called to it, be sometimes saw double in looking at near objects.

A case came under the writer's observation in which the left pupil was covered by the upper lid which was completely paralyzed. The pupil was partially dilated; vision $^{20}/_{40}$, and accommodation good. All of the external muscles of the eye were paralyzed except the external rectus, which made the eye strongly divergent. This condition had existed for some years, during which time the patient had been subject to attacks of migraine confined to the left half of the cranium. All the remedies that had been used in this case, including large doses of iodide of potassium, had given no relief whatever. Ten grain doses of antipyrin lessened the severity of the attacks and made them less frequent.

The prognosis in such cases is very unfavorable. The ptosis may be lessened by removing a portion of the skin covering the lid, but care must be exercised lest the lids be made too short for the cornea to be covered when the eye is closed.

Recurring Œdema of the Eye-lid Due to Uterine Disease.

Dr. Hiram Woods reports a case in the *Maryland Med. Jour.*, in which a woman æt. 29 years, who suffered from an hypertrophied uturus with chronic cervical endometritis and fungous granulations, had a marked œdema of her left upper eye-lid during seven successive periods of menstruation. When the uterine disease was cured the œdema no longer made its appearance. This is but one of the many forms of eye-trouble due to reflex action from disease of some other organ of the body.

On the Influence of Cortical Lesions on Vision.

M. Lannegrace (*Arch. de Med. Exper. et d'Anat. Pathol.*, No. 1, 1889) enumerates the best-known works on the subject, and the diversity of opinions on the same. His own methods of inducing the cerebral lesion and of testing for the lesion and the nature of it are carefully described. From his two years' experiments on dogs and monkeys he arrives at the following conclusions: 1. That visual disturbances can be induced not only by occipital lesions, but also by injuries of the frontal, temporal and parietal regions. In accord with Goltz, Loeb, Luciani, Tamburini and Bianchi, he finds that a lesion of the most anterior portion of the frontal lobe, of that in front of the motor zone, fails to induce visual trouble. 2. Not always does visual trouble ensue after injury of the regions named; it is frequently impossible to detect any visual defect, whichever region has suffered injury. The inference is either that there is no specialized area whose existence is necessary for the visual exercise, or that the induced visual imperfection, in some cases, is too feeble to be appreciated by the methods available. 3. The intensity of the visual trouble, induced apparently by identical lesions, varies greatly; the same is true of the degree of the induced sensory aud motor disturbances. 4. The intensity of the visual trouble depends upon the seat of injury. All conditions being equal, the most marked disturbances follow occipital lesions. 5. The intensity of the visual disturbance depends upon the extent of the lesion, augmenting considerably on the repetition of the injury. A lesion of one centimeter in diameter is always followed by visual disturbance; and, in case of negative results, a second lesion, either at the place of the preceding one or in its neighborhood, regardless of its diameter, is always followed by visual defect of great intensity. 6. Visual imperfections subsequent to the first lesion are always transitory, lasting from several days to several weeks. The compensation takes place either in the remaining cortical substance of the same hemisphere or in the corresponding portions of the opposite hemisphere. 7. Successive unilateral lesions render the visual trouble not only more intense, but more permanent and persistent. It is permissible to suppose that different cerebral portions compensate in a certain measure for the injured area, when such compensation is needed. 8. After the disappearance of visual disturbances induced by one or more unilateral mutilations, a symmetrical or non-symmetrical lesion on the opposite side not only gives rise to visual disturbances proper to such a lesion, but also makes the previous lesion reappear and renders it more persistent. This leads one to suppose that either one hemisphere compensates for its fellow (and evidently injury to the compensating hemisphere must of necessity result in the conditions stated), or, if gradual recovery after the first lesion is due to the remaining uninjured cortical portion, its function is abolished by inhibition after injury to the opposite hemisphere. The inference is that the function of one cerebral hemisphere depends upon the integrity of the opposite one. 9. Very extensive bilateral lesions have never induced permanent blindness, even when the occipital regions were mutilated; all these lesions involved the surface of the cerebral convexity.

With reference to the nature of visual disturbances the statements are made that: 1. The nature of disturbances following cortical lesions varies; there may be homonymous hemiopia or crossed amblyopia. 2. There may be pure homonymous hemiopia; crossed amblyopia is almost always associated with some degree of hemiopia, and is very rarely pure amblyopia. 3. The nature of the ensuing blindness is dependent upon the seat of the lesion; homonymous hemiopia follows lesions of any region; anterior lesions only are complicated by crossed amblyopia. It is proper to suppose the cerebral surface to possess a very extensive hemiopic zone, having the main focus in the occipital region, and a limited amblyopic zone anterior to the preceding one. 4. In visual disturbances of cortical origin tolerable perception of impressions seems always to exist in the center of the retina. 5. In accordance with Goltz and Loeb, the author finds that there is no correspondence between given cortical and retinal areas. This he does not state as an absolute rule. With regard to ocular, motor, sensory, and nutritive disturbances

induced by cortical lesions, the statement is made that the internal and external muscular mechanism of the eye remains intact, whatever the seat of lesion is.—*N. Y. Med. Jour.*

Myopia in American School Children.

Dr. Minor, of Memphis, examined six hundred and eighty-two children in the public schools of that city and found that less than five per cent were myopes, but these were all in the fourth class, and they constituted fifteen percent of that class.

It is well-known that student-life is a strong factor in the development of myopia. In certain classes in Germany, the per cent has been reported as high as sixty or even seventy-five. Myopic eyes should have glasses adjusted to them.

Transplantation of a Chicken Cornea.

The *Progres Medical* states that Dr. Gravenigo, of Padua, has successfully transplanted a section of a chicken's cornea to the cornea of a human eye. The operation was performed recently.

The operation was successful, but it will take six months or a year to determine whether or not the patient has been permanently benefited.

Melanotic Sarcoma of Eye.

In the *London Lancet* of September 24 is reported a case of melanotic sarcoma of the eye the histological characters of which were eminently malignant. The remarkable feature of the case was its slow growth, it having been diagnosed as an intra-ocular sarcoma more than eight years previous to its removal. When removed, the tumor had burst the globe and attained the size of the closed fist.

Secondary Eye Diseases.

Additional statistics are continuously being added to those already given to the profession in which is shown the importance of seeking the cause in every case in which nervous phenomena are exhibited. Dr. Ramey reported in the *Medical Record* of June 22, fifty cases of headache and neuralgia due to eye-strain, the greater number of the patients being cured and the others markedly benefited by the removal of the cause of the trouble. Graduated tenotomy of the ocular muscles is for the relief of various nervous troubles is no longer an experiment, but is a scientific procedure, the value of which cannot be overestimated.

Methods of Testing for Heterophoria.

In a paper published in the *Medical News* September 7, Dr. Randall, of Philadelphia, called attention to a simple test for the relative strength of the various ocular muscles.

It consists of an obtuse-angled prism—or, as it may be otherwise stated—of a double prism base to base. It is held with the junction line of its two inclined surfaces bisecting the pupil, and gives, of course, two false images equidistant from the true position of the object. In practical testing for distance the observer can cover one eye with the hand which holds the red glass, while he brings the prism into position with the other. A double point of light near the pole of the cornea tells when this is accomplished, and the patient can at once see two lights, and tell whether they stand in a vertical line. The red glass is then brought in front of the other eye, and a third light is seen tinged red. If midway between the two white lights, and in the same vertical line, every form of heterophoria is excluded at a single blow. On the other hand, the slightest vertical or lateral deviation is at once manifest; the red image may approach or blend with one of the white ones, or may wander to the side. If the strength of the prism is such as to give 1.5° of actual deviation in each direction—say 3° of angle in the older notation—no normal muscles are able to blend the real image with one of those vertically displaced; at 6 m. the apparent displacement is about 15 cm. above and below the actual level. Only an eye with weakness of inferior or superior recti will see the red image at any notable distance from the proper level, and the deviation may be at once measured with the prisms as usual. Of course, it is well to check the results by changing the double prism to the other eye. The test is as readily applied near by, the fixation object being an asterisk, or something of the sort, instead of a point of light.

Foreign Bodies in the Eye Ball.

An interesting and instructive lecture by Dr. Jeaffreson is published in the *London Lancet* September 28, on Foreign Bodies in the Eye. In the course of his lecture he said: "In the whole range of ophthalmic surgery there are no cases which require greater care, greater dexterity, greater patience on the part of the surgeon, and greater steadiness on the part of the patient, than the extraction of foreign bodies in the anterior chamber; for these reasons, therefore, unless under the most urgent circumstances, no attempt should be made to remove them till the patient is thoroughly anæsthetised." It seems to be a comparatively easy thing to do, to remove a piece of steel from the anterior chamber, when it can be plainly seen with the unaided eye, but Dr. Jeaffreson rightly says that no one who has had no experience with such cases can imagine the number of difficulties that may arise.

Dr. Jeaffreson summarises his treatment of foreign bodies in the eye as follows: 1. When an eye is hopelessly and irremediably destroyed it should be at once removed. 3. When an eye does not appear to be irremediably and hopelessly destroyed every effort should be made to retain it. If there is reason to suppose it contains a foreign body a search may be made, provided

always that there is reasonable probability that the foreign body will be removed and the damage to the eye not increased in an important degree. 3. In removing foreign bodies that are attached or embedded in the iris, chloroform should be freely administered. 4. Foreign bodies embedded in the lens, and not involving other structures, should not be removed too early; time should be given for the whole lens to soften and liquefy.

Treatment of Glaucoma.

At the annual meeting of the British Medical Association held at Leeds, August, 1889, Mr. Jonathan Hutchinson read a paper on the treatment of glaucoma (*Brit. Med. Jour.*) in which he submitted the following propositions:

1. As a rule, a free iridectomy is the safest and best treatment for all forms of primary glaucoma.

2. It is always well to use eserine before resorting to operation. In a very small minority of cases, eserine will be found to completely relieve the symptoms, and in a still smaller group the relief given by it may be permanent.

3. The continued use of eserine will very seldom suffice to prevent the recurrence of glaucomatous tension, and in any case, in which, in spite of it, the sight is declining and the field contracting, an operation should be resorted to.

4. The cases in which eserine is most useful are, first, those in which the disease has been induced by atropine, and next those in which the disease recurs after long intervals.

5. The more nearly any case approaches to the type of acute glaucoma, the probable more it is that the use of eserine will put an end to the process.

6. The more absolutely simple the case is, that is the more entirely free from pain, congestion, perception of haloes, etc., the less is there to be hoped from an operation.

7. Cases of simple glaucoma are not, as a rule, benefited by the continuous use of eserine, and the choice lies between letting the disease run its course and an operation. The progress of simple glaucoma is often very slow, and the interval is often long before the second eye is affected.

8. It follows from the last proportion, if simple glaucoma occurs in an old person, or in one feeble in health, that the patient's sight may easily last out his life.

9. Iridectomy for simple glaucoma is often followed by immediate deterioration in sight and advancing pallor of the disc, with or without increased tension. It can by no means be regarded as a harmless operation. When iridectomy is done for simple glaucoma, it should always be done very freely, and the patient should be prepared for the possibility that a second operation may be requisite.

10. In the first instance, iridectomy is preferable to sclerotomy, but if a relapse has occurred, then the latter may, in the hands of one well experienced in its performance, be a better procedure for a second operation.

11. A certain number of glaucoma cases, more especially those occurring in young adults, and in association with a definite inheritance of tendency to gout, should be treated with reference to that fact.

12. A certain number of cases of secondary glaucoma, especially those in connection with iritis, cyclitis, etc., are susceptible of permanent relief by eserine, and do not require an operation. This remark propably applied to most cases of increased tension in association with interstitial keratitis.

13. Although, as has been admitted, the prognosis after operation for simple glaucoma is always doubtful, it is yet the surgeon's duty to resort to operation in all cases in which the disease is definitely advancing, very old people being alone excepted.

14. If after an operation for glaucoma, recovery has been once well established, and the increase of tension completely relieved, it is very rare indeed for the disease to recur. Eyes once saved usually wear well.

This paper was discussed by many of the leading oculists of England and with few exceptions they concurred with Mr. Hutchinson's conclusions. Pilocarpine was recommended by some as a substitute for eserine when the latter caused irritation, and a few considered the former drug the more useful of the two. Mr. Hutchinson had been accustomed to using eserine in solution of one half grain to the ounce and he has had no bad effects from its use. (When an eye is attacked with unmistakable signs of acute glaucoma, no time should be lost in the use of eserine—iridectomy *should* be done *at once*).

Extraction of Cataract.

At the Leeds meeting, the various methods of extraction of cataract that are now used were freely discussed. A greater number of surgeons were in favor of extraction without iridectomy than were in favor of "mutilating the iris." Those who spoke however, were quite unanimous in the opinion that cases are encountered in which it is much better to perform an iridectomy before extracting the lens. Dr. Berry laid great stress upon asepsis and antisepsis, and he considered bichloride of mercury to be the best of all germicides. Dr. Hewetson also recounted many of the various ways of microbe infection, not omitting "our breath as a source of danger." During the last few years his successes have averaged 97%.

The last hundred cases reported by Dr. Knapp, of New York, had but one failure.

Doctor.—"You see, wifey, dear, I have pulled my patient through after all! A very critical case, I can tell you."

"Yes, dear hubby; but then you are such an excellent physician! Ah, if I had only known you five years earlier, I feel certain my first husband—my poor Thomas—would have been saved!"—*Archives of Pediatrics.*

TRANSLATIONS.

SUFFOCATING PNEUMONIA; PATHOGENESIS; TREATMENT BY THE ESTABLISHMENT OF A PERMANENT THORACIC FISTULA.

BY L. BOUVERET.

Translated by Dr. Wm. N. Beggs.

The common form of pneumothorax by perforation of the lung begins usually abruptly. Having a severe pain in the side, the patient is suddenly seized with a dyspnœa amounting to an orthopnœa even. After a longer or shorter period of respiratory anguish, however, a relative calm succeeds. The presence of air in the pleura often provokes inflammation. Then a liquid exudate is added to the gaseous. It is well known that even in tuberculous patients, this liquid exudate may remain sero-fibrinous for a long time. It, however, finally becomes purulent, as a rule. Thus a pyo-pneumothorax is formed. It may happen that the pleuro-bronchial fistula having cicatrized, the gases disappear and the pyo pneumothorax becomes thus a true empyemia.

There is another form of pneumothorax from perforation of the lung, happily very rare. It has been described under the name of valvular pneumothorax. The term suffocating pneumothorax would, perhaps, be preferable. The dyspnœa increases more and more and the patient dies of asphyxia without reaching that period of quiet which in the common form of pneumothorax succeeds the initial one of dyspnœa. The symptoms become worse and worse continuously and rapidly until death. I have observed two cases of this form of suffocating pneumothorax, and give here a short account of them:

A young man, æt. 24 years, was admitted into my division of the Hopital de la Croix-Rousse in the beginning of 1877. Three months before this he had an attack of subacute broncho-pneumonic tuberculosis. One morning on rising he was suddenly seized with a sharp pain in the left side of the chest, soon followed by severe dyspnœa. The oppression increased more and more during the day, until on his admittance the next morning I found him threatened with asphyxia. His face was cyanotic, and there had been an œdema of the lower extremities for several hours. I found the signs of a gaseous distension of the entire left pleural cavity. As yet there was no liquid exudate. The left side of the chest measured two centimetres more than the right. The diaphragm was depressed, and the heart was markedly displaced to the right, exactly as if it had been a case of great pleuritic exudation. In the right side there were fine subcrepitant rales beneath the clavicle and in the supraspinous fossa. In the evening I saw the patient again. The situation was more aggravated, and death by asphyxia was really imminent. The pressing indication was evidently to evacuate this vast gaseous expansion. A simple thoracentesis appeared to me to be insufficient, for the fistula would not certainly cicatrize, and after the puncture the gaseous distension would doubtless be reproduced. The indications would be better fulfilled by the formation of a thoracic fistula, making a permanent communication between the pleura and the external air.

I made the puncture in the sixth space, a little behind the axillary line, by means of a small trocar, four centimeters in length and of the diameter of a pigeon's quill, allowing the canula to remain. The air escaped from the chest. The canula was maintained in place by means of an elastic cord about the thorax, and an antiseptic dressing was applied. There was manifest relief, the dyspnœa appeared to decrease, the patient was relieved of the disagreeable sense of tension of the thorax which he had experienced, and the size of the left chest diminished one centimeter. Unhappily, the improvement was of short duration. The patient grew weaker and died in the night. The autopsy should give us the explanation of the lack of success. Both lungs, right as well as left, contained a large number of centers of caseous broncho-pneumonia, so that the respiratory surface was probably diminished by half. The left pleural cavity contained no liquid. It presented no trace of inflammation. The left lung, free of adhesions, was crowded against the mediastinum and the vertebral column. The pleural surface was sprinkled with spots, some livid and depressed, others grayish and raised. The former corresponded to atelectatic lobules, the latter to lobules affected with tuberculous broncho-pneumonia. One of these lobules was the seat of the perforation. It was very narrow and sinuous. It formed a very oblique passage through the caseous mass from the pleura to the bronchus. The right lung, aside from the tuberculous lesions, also showed evidences of compression. In the anterior and posterior borders a large number of the lobules was in an atelectatic condition.

In my second case of suffocative pneumothorax death occurred still more promptly for there was no surgical intervention. It occurred in a young man, æt. 18 years, diabetic, who had been under treatment three months in the Hopital de la Croix-Rousse. A month prior to the attack I had recognized signs of tuberculosis in the apex of the right lung. One day, during the visit, the patient suddenly felt a sharp pain in the right side, immediately followed by a very severe oppression. The disappearance of the vesicular murmur in the entire left side, and the existence of a tympanitic sonorousness of a slightly metallic timber, evidently indicated the development of a large gaseous exudation in the pleura. The patient was greatly troubled by an intense, frequent, violent cough. I limited myself to prescribing opium in large doses to calm the cough and respiratory anguish, intending to interfere, as in the preceding case, if the pneumothorax, which had arisen under my observation, should take the course of a suffocating pneumothorax. The next morning it was too late—the patient had succumbed during the night. Since morning the dyspnœa had continued to increase, and death,

due to a progressive asphyxia, had occurred within less than twenty-four hours of the onset. The lesions were very similar, except in extent, to those which I mentioned in the first case. It was also a case of subacute broncho pneumonic tuberculosis, but limited almost exclusively to the right lung. The perforation was caused by an oblique canal, very narrow and sinuous, through the caseous mass of a superficial lobule of the superior lobe. The compression of the right lung was very marked. No adherence fixed it to the thoracic wall. The left lung must also have suffered from marked compression for there was a large number of atelectatic lobules in the anterior and posterior borders.

Here were two cases of pneumothorax rapidly terminating in death, without any period of remission. The term, suffocating pneumothorax, is well justified. The characteristic of this formidable variety of pneumothorax is a rapid, continuous asphyxia, resulting in death in a few days or even hours.

In the common form of pneumothorax, a single lung, the one in which is situated the seat of perforation, is compressed, or, rather, lost for the respiratory function. Separated from the thoracic wall by a gaseous exudate which remains in constant communication with the bronchial air, the lung no longer obeys the respiratory movements of the sides and the diaphragm. The other lung, however, if it is sound, is sufficient for respiration, at least during repose. It is not so, however, in a case of suffocating pneumonia. Here the compression acts not only upon the perforated lung, but also upon its fellow, the heart, and the large veins of the mediastinum. The gaseous expansion acts exactly as a large pleuritic exudation would. It dilates the thoracic walls, depresses the diaphragm and drives back the mediastinal wall, through which it compresses the heart, the great venous trunks, and even the opposite lung. Hence we have the development of a progressively increasing dyspnœa, of asphyxia, and of grave circulatory troubles, such as are observed in certain cases of pleurisy with rapid and extensive exudation. Besides, the two cases which I have just detailed furnish peremptory proofs of these phenomena of extreme compression caused by a gaseous expansion within the pleura.

In the first case the left thorax measured two centimeters more than the right; the heart was pressed over to the right, the apex beat being at the right border of the sternum. The œdema of the limbs appeared shortly after the beginning of the attack; finally, the right lung, the side opposite to the pneumothorax, presented a large number of sunken, atelectatic lobules, evident proof of a strong depression transmitted through the mediastinal wall.

Since the gaseous expansion in the pleura is capable of producing such a compression of the intra-thoracic organs, it is evident that it can acquire and maintain a tension greater than the atmospheric pressure.

How can this excess of tension be brought about? How can the bronchial air, penetrating the pleura through a pulmonary perforation, acquire a tension greater than that of the external air? The explanations of the classic authors are far from satisfactory. In the books and memoirs which I have consulted upon this subject, it is said that the air enters the pleural cavity at the moment of inspiration. If this is so it is impossible to conceive of this excess of pleural tension over the atmospheric pressure. At the moment of inspiration the bronchial air suffers a diminution of tension, a condition, moreover, indispensable to the entrance of external air into the respiratory passages. If it is at this same moment of inspiration that the penetration of bronchial air into the pleura occurs, it is impossible that the pleural air should ever attain a tension superior to the atmospheric pressure, since the bronchial air, with which this pleural air communicates by means of a fistula, supposably permeable at the moment of inspiration, always possesses during inspiration a tension inferior or only equal to the pressure of the atmosphere.

It is only during expiration, and especially during cough, that in suffocating pneumothorax the bronchial air gains access to the pleura. At the moment of expiration the tension of the bronchial air is superior to the atmospheric pressure, and this excess is still more marked during cough. Now in pneumothorax the cough may be intense and frequent. Each spasm of cough drives a certain amount of bronchial air through the pleuro-pulmonic fistula; hence a progressive accumulation of gas in the pleura.

It is here that the variable arrangement of the fistulous orifice becomes of importance. This orifice is always open during cough, even in the common forms of pneumothorax.

It may happen, however, that, during inspiration, the orifice may be open or closed.

If the orifice is large, direct, non-sinuous, establishing an easy communication between the bronchus and the pleura, it remains permeable during inspiration. Thus the evil effects of expiration, and especially cough, are compensated. Thanks to this communication of pleural air with bronchial air, renewed without cessation at every inspiration, it is evident that the gaseous expansion in the pleura can neither acquire nor maintain a tension superior to the atmospheric pressure. This is the course of events which occurs in the pneumothorax, justly called open pneumothorax. This is also the most common form. The lung is not, properly speaking, compressed. It supports an equal pressure upon both of its surfaces. It contracts upon itself by virtue of its own elasticity. For the same reason there is no compression of the heart, nor of the opposite lung.

In some cases of pneumothorax, happily very rare, the fistulous orifice is so arranged that it remains closed during inspiration, and is opened only during expiration and cough. Two anatomical conditions bring about this bad condition of the fistulous orifice. In the first case the orifice is very narrow and covered by a membranous flap forming a valve. This valve is raised during expiration and cough. It then allows bronchial air, whose tension during expiration and cough is great-

er than the pressure of the atmosphere, to penetrate the pleural cavity. During inspiration, on the contrary, this valve is more closely applied to the fistulous orifice. Then the bronchial air suffers, at the moment of inspiration, a diminution of tension, while the plural air acquires during expiration and cough a tension more or less greater than atmospheric pressure. In the second case there is no valve, properly speaking, but the result is the same. The communication is established between the pleura and the bronchus by a narrow sinuous channel, whose two walls, soft and compressible, violently separated during cough, are closely applied to each other during inspiration, and thus shut off all communication between the pleura and bronchus during inspiration. Now, it is easy to conceive of the consequences of such a disposition of the fistulous orifice. The air penetrates the pleura at each attack of coughing, and this penetration is so much the more inevitable because the cough itself is provoked by the contact of the air upon the pleura. Cough is, then, very dangerous in pneumothorax. Now this air which penetrates the pleural cavity during cough cannot find egress at the moment of inspiration. Hence we have a progressive accumulation of gas within the pleura, and under a pressure which may equal the tension of the bronchial air during the violent coughing, *i.e.*, very much greater than the atmospheric pressure. The perforated lung not only retracts upon itself by virtue of its elasticity, but it is actually compressed. The compression may also affect the heart, the great venous trunks and, through the mediastinal wall, the opposite lung. Hence the growing dyspnœa, the progressive asphyxia, the cyanosis, the œdema of the extremities, symptoms of extreme intra-thoracic compression, such as one observes in great pleuritic exudations of rapid development.

There are then two kinds of pneumothorax. In the common pneumothorax, well named open pneumothorax, the fistula is large and remains permeable during inspiration, the tension of the pleural air does not exceed the atmospheric pressure; the perforated lung is retracted rather than actually compressed; the grave symptoms of intra-thoracic compression are entirely absent.

In suffocating pneumothorax the fistulous orifice is compressed during inspiration; the tension of the pleural air may greatly exceed the atmospheric pressure; hence the development of the gravest symptoms of intra-thoracic compression, *i. e.*, progressive asphyxia without remission till death.

These contributions to the pathogenesis and this distinction of the two forms of pneumothorax permit us to establish better the principles of treatment.

Cough is always dangerous; cough must then be especially combated. The best means is certainly opium in large doses, given internally, or indeed subcutaneous injections of morphine pushed until a certain degree of narcotism is produced. This medication is sufficient in open pneumothorax, in which the fistula is permeable during inspiration as well as expiration. It is certainly insufficient, however, in suffocating pneumothorax, in which the fistula, open during cough, is closed during inspiration. Here progressive asphyxia is inevitable.

In such a case the indication is, undoubtedly, to evacuate the great gaseous expansion which compresses the heart and both lungs, as one would evacuate a very great pleuritic exudate. It is clear, however, that a simple intermittent evacuation, such as thoracentesis, accomplishes, is altogether insufficient, and does not completely fulfil the indications. When the trocar is withdrawn from the chest the cough drives new bronchial air into the pleura, the phenomena of intra-thoracic compression reappear, and the patient experiences only a very transient relief. Since the expansion is rapidly and continuously reproduced it is necessary that the evacuation be equally continuous. There are no other means of accomplishing this result than by the establishment of a permanent fistula in an intercostal space. Now this fistula may be established by two methods, pleurotomy, as in a case of purulent exudate, or puncture with a trocar whose canula remains resting in the intercostal space. Both procedures are not lacking in inconveniences. The penetration of external air into the pleura is more dangerous than that of bronchial air. Opening the parietal pleura involves almost inevitably the development of a purulent pleuritis. Empyema is, however, less to be feared than the peril which suffocating pneumothorax occasions, since death by rapid asphyxia is the inevitable termination of this form of pneumothorax. Besides pneumothorax itself results sooner or later in a pyopneumothorax, and, on the other hand, empyema is not an incurable ill. It often heals if it is promptly and suitably treated by antiseptic pleurotomy.

To fulfil this fundamental indication of the treatment of suffocating pneumothorax, puncture, with a canula to be left *in situ*, appears to me preferable to the large incision of pleurotomy, for it accomplishes the desired end, and is one of the most simple and easy applications. For this purpose I have had a small trocar constructed. It is four centimeters long, three millimeters in diameter, and has two lateral eyelets to which an elastic cord may be attached. This being passed around the thorax maintains the canula in place in the intercostal space. This little operation must be performed with all the precaution of antisepticism. It is even good to use the spray as in pleurotomy. Above the canula an antiseptic dressing must be placed. It should be large and thick enough to filter as thoroughly as possible the external air which may pass into the pleural cavity.

Theoretically the thoracic fistula should be maintained to insure the permanent evacuation of the gaseous expansion until the pleuro-bronchial fistula is completely cicatrized. It is then only that one would no longer fear the promptly fatal effects of an accumulation of gas in the pleura under a tension superior to that of the atmospheric pressure.

The period of this cicatrization is, however, very va-

riable, and the fistula having been permanently established, there are no signs which can certainly inform us of the condition of the pleuro-bronchial fistula. It is necessary then to not withdraw the canula too early.

Suffocating pneumothorax has been observed hitherto only in the tuberculous. Tuberculosis, however extensive, does not seem to me to constitute a contraindication to so simple an intervention as puncture and allowing the canula to remain. If phthisis in a very advanced stage, or of very rapid progress, renders death inevitable and near, the operation at least diminishes the sufferings of the patient. When the other lung is comparatively healthy it is delivered from a promptly fatal compression and may suffice for respiration in repose. Life may thus be more or less prolonged and the death will be due to the progress of the phthisis itself. If it is, however, a case of chronic phthisis, and the lesions are still very limited, the interference may be followed by a much more favorable result. The imminent danger is removed, for by the establishment of a permanent thoracic fistula, the suffocating pneumothorax is in a manner transformed into an open pneumothorax. Pleurisy will develop after some days, the result, however, of the pneumothorax itself as much as of the permanent fistula. A vigorous antisepsis of this fistula may retard the purulent transformation of this pleuritic exudate. If the pleuritis becomes purulent it may be treated successfully by an antiseptic pleurotomy. In tuberculous empyema pulmonary lesions of slow progress and limited extent do not constitute a formal contraindication for pleurotomy.—*Lyon Medicale.*

A Simple Method of Reducing Dislocations of the Hip.—Dr. Lewis A. Stimson, of New York describes in the *New York Med. Jour.* a method which has served him when other manipulations had failed in backward dislocations of the hip joint. The principle involved is that of making the weight of the limb a coadjutor in the reduction instead of an opponent. The patient is brought to the side of the bed, the injured limb is made to hang directly down while the knee is fixed at a right angle. The surgeon supports the ankle while he gently moves the limb from side to side, when presently the muscles will be found to be relaxed, then with a slight pressure downward with one hand in the hollow of the knee, the bone will generally slip into place with an audible snap. The downward pressure can also be effected by placing a heavy sand-bag, five or six pounds, upon the upper part of the leg and in the hollow of the knee. This simple method occurred to Dr. Stimson one summer day when he was exhausted in his efforts to make reduction by other well known procedures. The first time he tried it, the attempt was successful in less than one minute; and the success in two other and more recently reported clinics indicates that the plan may succeed in many cases.—*Practice.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,

Editor.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, NOVEMBER 2, 1889.

The Smart Quack.

Geo. Smart, who for the last two or three years, has rejoiced in the noble occupation of curing (?) diphtheria with his home-made compound, a powder, which on analysis proves to be composed of charcoal, sulphur, borax and sodium, seems at last to be in a fair way of attaining his just deserts.

His methods have long been known to the profession of the city, and likewise to the authorities, but whether through dereliction of duty or otherwise, practically nothing has been done, up to the last month or so, for his suppression—notwithstanding the explicit rulings of the law pertaining to such cases, which seems to cover the ground completely.

It is as follows:

"Any person shall be regarded as practicing medicine within the meaning of this act, who shall profess publicly to be a physician, and to prescribe for the sick; or who shall append to his name the letters M. D.

"Any itinerant vender of any drug, nostrum, ointment or appliance of any kind, intended for the treatment of injury or disease, or who shall, by writing or printing, or any other method, publicly profess to cure or treat disease, injuries or deformities, by any drug, nostrum, manipulation or other expedient, shall pay to the State a license of $100 per month, to be collected as provided for by law, as all other licenses are now collected, and any person violating the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine not to exceed $500, or by imprisonment in the county jail not to exceed six months, or by both such fine and imprisonment.

"Any person practicing medicine or surgery in this state without complying with the provisions of this act, shall be guilty of a misdemeanor, and be punished by a

fine of not less than $50, nor more than $500, or by imprisonment in the county jail for a period of not less than 30 days nor more than 365 days, or by both such fine and imprisonment, for each and every offense.

"Whenever in this act it is provided that any duty or service shall be performed by any County Clerk, such duty and service in the City of St. Louis shall be performed by the City Register or Health Commissioner of the City of St. Louis, as if such officer was specially named to perform these duties and services."

Beyond a doubt, sufficient evidence has long been obtainable to convict Smart of professing "publicly to be a physician, and prescribe for the sick;" of, "by writing or printing, or any other method, publicly professing to cure or treat diseases * * * by drugs and nostrums" of his own manufacture, and yet, nothing has been done, because, forsooth, it was feared that he could not be convicted!

We are gratified to learn that at last some endeavor is being made to bring Mr. Smart to a halt. Collector Ziegenhein has called upon him to pay the $100 license, and if he refuses, he will be prosecuted under the provisions of the above law.

The charge made by a daily paper, and affirmed by several families, that collusion between Smart and one of the employes of the Health Department enabled Smart to immediately discover the location of each case reported, will doubtless prove groundless, nevertheless we are glad to say that Chief Sanitary Officer Francis has taken steps to investigate it.

Hypnotism and Insanity.

At the late meeting of the British Medical Association Dr. Auguste Voisin, Physician to the Salpetriere, Paris, made a communication on the treatment of insanity and neuroses by hypnotic suggestion, and on the application of the method to the moral and instinctive perversion of backward and imbecile children. He stated that until within the past few years no serious attempt had been made in this direction, and that it was generally supposed that the insane could not be hypnotized. Dr. Voisin had been able to develop this method in his hospital and private practice. Catalepsy ought to be carefully avoided, because the hypnotized individual ought to be able to preserve the use of senses, especially of hearing. He was convinced that hypnotism was useful only when it was possible to make use of suggestion, and he was firmly of opinion that, as Braid has said, the hypnotic state originated in the nervous system of the hypnotized person. Having described the basis of hypnotic treatment and of suggestive therapeutics, Dr. Voisin detailed the various categories of the insane with regard to whom he had made observations. By this treatment he had cured persons suffering from hallucinations and delusions, and from disturbances of special and general sensation. Suicidal ideas and acute and furious mania had disappeared under the use of this method. Cases of insanity had been cited which had been calmed only after several hours. The treatment had also succeeded in the mania and agitation observed during the catemenia. Patients in this category had even remained asleep for from six to eight days. The method had also succeeded in dipsomania and morphinomania. Dr. Voisin had also been fortunate enough to cure obstinate cases of onaism in this way, had applied the method *a la moralisation des enfants depraves*. He had thus completely transformed their habits of thought, and had brought them to love the good, whereas they had formerly only loved the evil. He had also succeeded in curing amenorrhœa in the insane, which was a frequent cause of nervous an mental troubles; he particularly insisted upon this point as proving it was possible to influence the sympathetic system.

In the discussion which followed Dr. Yellowlees said his attitude of mind toward this paper was simply one of amazement. There was something that cured mania, banished hallucinations, cured love of drink and morphia, stopped masturbation, improved the memory, made imbeciles wise, and bad folk good; moreover, it cured amenorrhœa, and the patient menstruated as directed. It resembled nothing so much as the waving of a conjuror's wand, and saying to disease, "Begone." Moreover, in nine-tenths of the cases the cure was permanent. If all this were true, their vocation was gone, and they must seek some other profession. Dr. Voisin must not deem them disrespectful if they were a little incredulous as to these wonderful results. It might be that there was something in the vivid Gallic nature that we had not here, or something in Dr. Voisin's method that they did not know. Certainly they had seen no such results from hypnotism here, and certainly he had never heard of results so amazing as those enumerated in Dr. Voisin's paper.

Remarks were made by various other members, some in the same strain as the last, and others confirmatory of Dr. Voisin's results.

The Christian Science Healers.

It has often been stated that the American people like to be humbugged, and however unpalatable this statement may be, instances occur almost daily which would seem to bear out the truth of the assertion. This statement holds good to a certain degree; the imposture must not be too apparent, and it must possess certain pleasant or attractive features to recommend it; furthermore, it must not be too positively harmful.

The numerous Isms, Pathies, and whatnots that are constantly springing up in opposition to the regular school of medicine form, perhaps the most common and popular form of humbuggery. With the above requisites they are certain to command plenty of followers, and to have an existence more or less prolonged according to the amount of opposition met; if

left to themselves their sojourn is generally brief.

Christian science was a typical humbug of its class, and enjoyed a brief prosperity, but is now on the decline. Some of the ideas propagated by its followers were really beautiful from a sentimental point of view, but when put into practice they often proved the source of much harm, and it is satisfactory to learn that a few of the christian science healers at least, are about to receive their just dues. As we learn from the *N. Y. Med. Jour.*, one of the leaders has been arrested in Brooklyn on a charge of manslaughter.

The charge against him states that he contributed to the death of a young woman, not over twenty-four years old, who, until a week before her death, had apparently been in blooming health. She was taken sick with a fever, probably typhoid, on a Friday, and on the following Thursday was dead. All proper medical care was denied the sick woman. Religious observances were performed about the sick bed for some days, as the sole means of cure. And, even after death had taken place and the body had been put into the ice-box used by undertakers, the prayers and other ritual were continued in order to call upon the deceased to "arise again in the flesh."

Since the above arrest another death by neglect has been reported from among the same coterie of deluded people.

Ptomaines and Leucomaines.

There is no longer any doubt that the announcement and general acceptance of the germ theory of disease constitutes one of the greatest epochs in the history of medicine. But, as in the case of all great truths, so in this, the first ideas on the subject have had to be greatly modified—the first extravagant hopes have been disappointed or deferred, and the first claims of its advocates found to be too sweeping.

At first it was imagined that all the grave symptoms of a germ disease, and the death of the patient, were due directly to the presence and multiplication of a specific microbe in the same sense as the destruction of fruit trees and field crops, is sometimes due to the ravages of insect pests. The first great modification of this original idea was, that the disease and death in these cases are not due *directly* to the microbes, but to the *accumulation* in the blood (or on the mucous surface to be absorbed into the blood) of a *poisonous chemical substance, a by-product of a microbian multiplication.* These by-products of albuminoid fermentation (for there are many kinds) have now been insolated from their microbian culture-fluids and analyzed. They may be regarded as alkaloids of albuminoid decomposition and are called ptomaines. They are, most of them, deadly poisons. The fact of a poisonous by-product of disease germ-multiplication ought to have been anticipated; for every form of fermentation has its peculiar chemical by-product, and many of these are poisonous.

By the inoculation of these pure chemical products, the symptoms of the corresponding diseases have been produced, such as typhoid and diphtheria, without the presence of any pathogenic microbes, and not only this but they have been successfully used as a vaccine against the corresponding disease.

We are now, probably, on the eve of another modification equally important and sweeping. Besides the albuminoid decomposition of *microbian* origin there is going on continually in the animal body, as a strictly physiological process, albuminoid decomposition (wasting of the tissues) in the presence and *under the guidance of cell life.* This also, as might be expected, produces poisonous products, which have been isolated and analyzed, and found to belong to the same class of chemical bodies as the ptomaines. They are called leucomaines and are in the highest degree dangerous; they are not usually deadly, because of their continual elimination. But suppose there should be some change in the process of tissue-waste, rendering them more poisonous, or some failure in the function of the organs by which these poisons are normally eliminated; evidently the result would be disease, and not only so, but disease *similar to those produced by disease germs, except that they would lack the property of contagiousness,* because not due to the presence of microbes. Can we point out any such? Perhaps not yet, with any certainty. (Cholera morbus?–Ed.). But it is possible that some of these obscure, sporadic and apparently non-contagious forms of fever which often run so insensibly into each other, and so puzzle the physician to classify, such as typhoid, malarial, continued fever, etc., may be produced in this way, in addition to the countless unclassified slight fevers and indispositions. This modification is an abatement of the arrogance of the germ-theory and is equivalent to an abandonment of its former claims as a *universal theory of the cause of disease.*

Of the organs which eliminate leucomaines, the liver is undoubtedly by far the most important. This has been shown by Schiff on the lower animals. * * * These poisons are not eliminated as such, for they do not appear in the bile, and I believe that the liver has the power of splitting albuminoids into glycogen, and urea. If this be true of leucomaines, it is probably true of ptomaines also; then the belief in the importance of the liver, and the practice of clearing the bowels and stimulating the liver in the early stages of disease,—a practice reached empirically, and often ridiculed—receives ample justification.—Jos. LeConte in *Pac. Med. Jour.*

Substitutes for Opium in Chronic Diseases.

A paper with the above title appears in a recent number of the *Bost. Med. and Surg. Jour.*, by J. F. Adams, M.D., having a growing dissatisfaction with opium as its motive, and it is designed as an argument in favor of restricting the use of opiates to a greater degree than has

hitherto been the prevailing custom. He states the dis-disadvantages of opium as follows:

1. Opium in an overdose is an active poison, though, in careful hands, fatal accidents from the use are of very rare occurrence.

2. In ordinary doses the benefits of opium are largely offset by various functional derangements, such as digestive disorders, constipation, impairment of the hepatic function, headache, depression and various nervous disturbances, which often times tend to keep up the very condition of the system which led to its use; for instance, in gout, rheumatism, and lithæmic neuralgia.

3. The use of opium involves the danger of the opium habit. The estimate which places the number of opium takers in the United States, exclusive of the smokers, at 150,000, does not appear exaggerated. When the cause is attributable to physicians' prescriptions the fault usually consists in the unlimited or unauthorized renewal of the perscriptions—a great abuse which needs legal restriction. Then again, our people are, to a great extent, both selfindulgent and neurotic. They refuse to bear pain, and are apt to prefer the doctor who gives the quickest relief. It is pleasanter to give a hypodermic injection than to refuse it to a suffering and unreasonable patient. These influences cannot be ignored, for even doctors are human—at times.

It is in chonic cases that opium needs to be used with the greatest caution, for here the unfavorable effects upon the system are the most marked, and the formation of the opium-habit is particularly to be feared from the patient being under less constant supervision.

The usual reason for giving opium is the belief that no other remedy is capable of accomplishing the desired result, but recent discoveries in therapeutics have placed within our reach several safer remedies which may be used as substitutes. Among the most notable is the discovery of the analgesic powers of the antipyretics. As a matter of course these all have their drawbacks and limitations. For the relief of pain we have antipyrin and acetanilid, which have been sufficiently tested to have their sphere of action pretty clearly circumscribed. Phenacetine is growing in favor, while exalgine has already made a favorable impression. Salicylic acid relieves the pain of rheumatism from its curative effect. Other analgesics of great value are quinine in neuralgia, especially the malarial variety; cocaine hypodermically, galvanism and massage.

To induce sleep we have sulphonal, hydrate of amyl and paraldehyde.

In chronic diarrhœa the use of sodium salicylate, in five to ten grain doses has proven very satisfactory. Salol has been used with success, and naphthalin comes highly recommended.

In conclusion, he says: "As an analgesic, opium still stands at the head of the list for promptness and certainty; but the antipyretics which have been mentioned are capable of replacing it in probably the majority of chronic cases, and the relief which these agents affords is attended with less disturbance of the system than that which is induced by opium. In my own practice opium has become a much less important element than it was a few years ago."

MEDICAL ITEMS.

Bichloride of Mercury in Gonorrhœal Rheumatism.—In the firm belief that gonococci are present in the blood, in gonorrhœal rheumatism, Jullien administers—and, he claims with much success—bichloride of mercury, hypodermically.

Total Ablation of the Parotid.—M. Polaillon recently presented to the Academie de Medicine a boy from whom he had removed the entire right parotid gland. The operation was performed for the relief of a large cystic adenoma, the size of an orange. Recovery followed in due time.

Labor Without Pain.—M. Fanton, of Marseilles, is in the habit of conducting his *accouchements* while his patients are under the influence of hypnotism, and according to his report, with almost uniform success. One time, when he suggested to his patient to have no pain, labor was discontinued for four hours; the suggestion had been received as meaning that she should have no *contractions*.

A Solution for Preserving Sponges.—In order to avoid the disagreeable odor of carbolic acid, and at the same time, keep sponges in an antiseptic condition, Prof. Berrens, in *Gaz. de Gyn*, recommends the following:

℞	Thymol, - - - -	xvi grains.
	Alohol, - - - -	i drachm.
	Aquae, - - - -	ii pints.

A Ready Method of Diagnosing Gonorrhœa.—According to Jullien, gonorrhœal discharge is always acid, whether the disease be acute or chronic, but, on the other hand,every discharge which bathes the genital organs, other than gonorrhœal, is alkaline. This furnishes a ready method of diagnosticating in doubtful cases, the acidity declaring in favor of gonorrhœa, except the vagina, the mucus of which is normally acid.

The University of Pennsylvania has thrown open its doors for the admission of women to all its classes. While this is in some respects a great step forward, on which the University is to be congratulated, an exception should have been made in the case of the medical department. Co-education in medicine is not all desirable, the fact does not admit of much argument. It is an innovation which should be shelved until we approach the millenium.

A New Disease.—In a daily paper an enterprising journalist reports an autopsy of a case of "scercherder-

ma," which recently took place in New York. The article is headed "A Strange Disease," which it certainly is, to say the least. The statement that it will be "of great interest to the medical profession" should also prove true, inasmuch as a careful search in medical literature fails to find any mention of this unique disease.

German Universities and Foreign Medical Students.—*Le Progres Medical* contemplates with sorrow the progressive increase in the number of students who yearly hie themselves to Berlin to seek their medical education. It was in 1881 that the influx began; 15 English students were in that year enrolled by the University of Berlin. In 1889 the number was 42, and the increase for other nations has been correspondingly great. English, Americans, Belgians, Austrians, Swiss, Hollanders, Servians, Bulgarians, Roumanians, Chinese, Japanese alike take advantage of the facilities offered for attaining a medical education at Berlin.

Gummatous Growth Simulating Rupture of a Muscle.—An interesting case well indicating the futility of placing too much faith in the statements of patients, is related in the *Brit. Med. Jour.*, by Mr. Alexander Scott. On coming to him the patient showed a tumor, or fulness, in the situation of the right rectus abdominis about two inches square. The upper border was well defined and sharp and the hand could be introduced above it, whilst the lower extemity was less distinct, fading into the general substance of the rectus. "The patient was positive that the fulness had arisen suddenly, and added that he had been lifting heavy weights lately. The history and general characters of the growth pointed to a rupture of the rectus muscle, but the symmetry and unimpeded facility which the abdominal parietes could be contracted rendered this highly improbable." Questioning elicited the fact that he had formerly had a sore on his penis, had married, and his wife had aborted several times. This, together with other points, led the writer to prescribe iodide of potassium, and the growth had sensibly diminished by the end of the first week. It disappeared entirely in due course of time.

FROM THE GERMAN.

By W. C. Mardorf, M. D., St. Louis.

Guaiacol in Phthisis.

Fawizki has treated eighteen cases of phthisis with guaiacol, in four drop doses, two or three a day, given with tincture of gentian and sherry wine. He believes that guaiacol, like creasote and menthol, is not a specific in phthisis, but is rather a valuable symptomatic remedy; it seems to have an anticatarrhal action. In but one of his cases did there seem to be any real improvement in the condition of the lungs; the tubercle bacilli disappeared. Superficial lesions in the larynx healed rapidly under local applications of a solution in oil; the deeper lesions were not affected.—*St. Petersburg Med. Woch.*

The Morbid Anatomy in Fatal Burns.

Various theories have been advanced to explain the sudden death which sometimes follows severe burns involving two-thirds of the surface. Sonnenburg believes that death is brought about either by over-heating of the blood followed by heart failure, or by shock. Parfick ascribes death to the destruction of the blood corpuscles by heat, and this corpuscular debris passing into the internal organs leads to a blocking up of the kidneys. Post-mortem and microscopical examination by Dr. Eugen Frankel, in *Deutch. Med. Woch.*, tend to substantiate the latter theory. The pathological changes were found principally in the kidneys, but also in the liver and spleen. A finely granular and strongly refractive substance was found in the proximal convoluted tubes and loop-tubes of Henle, which partly covered the epithelial cells and partly lay free in the lumen. He attaches great importance to the combination of degeneration of the secreting epithelium and stopping-up of the tubercles by masses of hæmoglobin. His investigations have so far led to no practical results as to hints for treatment.—*Deutsch. Med. Zeit.*

The Relation of Scrofula to Tuberculosis.

Dr. E. Madigliano, of Pisa, has made some experimental investigations on rabbits and guinea pigs to determine whether scrofula and tuberculosis are exactly identical.

Koch, as is well known, discovered the presence of the tubercle bacillus in scrofulous formations, as well as in those of tubercular origin, and from this it was assumed that there was no æstiological difference between the two, both being caused by the same bacillus This belief in their identity went so far that certain investigations in this line made no distinction between the two in carrying out their experiments, using bacilli from a tubercular noduli at one time, and at another those from scrofulous products.

Madigliano took for granted the correctness of the results of numerous experiments on the lower animals with tubercular nodules, and therefore used only human scrofulous glands, after the methods of modern bacteriology. He inoculated 45 rabbits and guinea pigs with the scrofulous products of three different patients subcutaneously, in the peritoneal and pleural cavities. All of the guinea pigs developed tuberculosis, and the microscope revealed the presence of Koch's bacillus. The disease, however, developed much more slowly than if tubercular products had been inoculated, and the extent of tubercular infection was much less; for example, one of the guinea pigs gave birth to healthy, well-developed offspring four months after inoculation, and four

more months passed before external signs of the disease appeared; three others remained in apparent health for a still longer period before the disease became manifest. All the rabbits inoculated remained healthy. Secondary inoculations were now made with material from the diseased guinea pigs. Madigliana's experiments led him to the following conclusions:

1. The virus of scrofula is really an attenuated form of the tubercular virus; the disease caused by it is much milder than that caused by real tubercular virus, and is harmless to rabbits.

2. After passing scrofulous virus through a generation of guinea pigs, its virulence becomes intensified to that of tuberculosis, and inoculations with it on rabbits are successful, while at first this property was entirely wanting.—*Deutsch. Med. Zeit.*

A Case of Diabetes Mellitus.

Dr. Ivan Michael relates the following case in *Deutsch. Arch. f. Kl. Med.*: A robust man, æt. 20 years, began to present the symptoms of a moderately severe diabetes, without any apparent cause.

After three months his increasing weakness and extreme thirst forced him to seek the hospital. While there he had passed through an otitis media suppurative, left, but his general condition improved so much that he was discharged at the end of three months at his own request. Shortly after leaving the hospital his ear trouble returned, and his strength rapidly failed at the same time; he was readmitted to the hospital and died two days afterward in a state of coma, and about six months after the first signs of diabetes.

At his first admission to hospital, an examination of the urine gave a plain acetone reaction and $2\frac{1}{2}\%$ of sugar.

At the post-mortem, a free cysticecus racemosus was found in the fourth ventricle; there were exuberant granulations on the ependyma of the fourth ventricle.

During life there had been nothing save an occasional passing headache, that might have indicated a lesion of the central nervous system; this was probably owing to the slow growth of the tumor.

According to Prof. Steinbruegge, inflammations of the middle ear are not at all rare in diabetes.

Several cases of cysticercus of the fourth ventricle have been described, in which there was no accompanying mellituria; in one case there was diabetes insipidus. *Deutsch. Med. Zeit.*

Chloralamid, a New Hypnotic.

Dr. Erich Peiper has used chloralamid in a number of cases to test its efficiency as a hypnotic. The average dose is 2 to 3 grains, and the effect is manifested in from $\frac{1}{2}$ to $1\frac{1}{2}$ hours, the sleep resulting lasting in all cases at least 7 or 8 hours, and being deep and unbroken. In some cases the disadvantages attending its use were noted as follows: A tired, sleepy feeling during the following forenoon (a common drawback of most of the more recent hypnotics); in two cases a dryness of throat was noticed; extreme thirst in several cases, especially those in which the administration of the drug was accompanied by but a small amount of fluid. These cases complained of headache. He observed no noticeable influence upon the pulse, respiration or temperature; the digestive functions were unchanged, as well as in phthisical patients the cough and sweats.

The question as to whether the drug has a cumulative effect is unsettled. Despite all the above mentioned disadvantages, in only one case did they assume any considerable importance. Wherever he was able to contrast the action with that of chloral, as in several cases, the new drug bore off the palm.—*Deutsch. Med. Woch., Cent. f. d. ges. Ther.*

Dr. Ed. Riegel (*ibid.*) has also used chloralamid, especially in insomnia, and finds that it fulfils completely the requirements of a hypnotic, as follows: 1. Certain, quick action followed doses of 2 or 3 grams (30 or 45 grains), sleep resulting in an average of one-half or three-quarters of an hour, sometimes earlier, seldom later. 2. Disadvantages sufficient to contraindicate its use were not present, inasmuch as the patients felt well on awakening, and objectively no circulatory changes were noted.

The drug seems to be best administered in a slightly acid medium.

Turpentine in Pseudarthroses.

Prof. Mikulicz recommends the use of oleum terebinthenæ as an irritant in false joint. He makes a longitudinal incision through the soft parts and periosteum at the site of fracture, and raises the periosteum; in the space thus formed he stuffs gauze soaked in oil of turpentine, renewing the dressing every second or third day, this being effected without much pain. At the last congress of the German Surgical Society, he exhibited a case which illustrated in a marked degree the efficacy of this treatment.—*Cent. f.d. ges. Ther.*

Statistics of Nursing Children.

Iedeschi (L'osservatore) has published some extensive statistics including 9,083 children, and illustrating 11,954 forms of disease. These were 3,012 children under one year of age, 1,411 male, 1,601 female; 2,001 were nursed by the mother, 211 by a wetnurse, and 800 received artificial food only from birth on. Of the first two classes, 2,212 in all, 507 were nourished by breastmilk exclusively, while in 1,705 the breastmilk was supplemented by artificial foods. In the group of 507 children the author observed rachitis 56 times; in the group of 1,705, 993 times; in the group of 800, 693 times.

Of the whole 3,012, 709 suffered from cholera infantum, distributed as follows: 21% of those fed on

mother's milk, 41% of those on mixed diet, and 55% of those on artificial food alone.

As to the treatment of cholera infantum, the author achieved the best results with sodium benzoate, ℥i in 24 hours, and a restricted diet; this treatment was em ployed in 474 cases.

As an artificial food Iedeschi proposes the following: milk, ½ pint, water 1½ pints, mixed with the whites of five eggs; he observed excellent results with this combi nation.—*Deutsch. Med. Zeit.*

Pilocarpin in Traumatic Tetanus.

Casotti (*Gaz. d. Osp.*) reports three cases of traumatic tetanus recovering under the use of pilocarpin. In the first case the patient grew worse in spite of chloral and bromides, whereupon the following treatment was instituted and kept up for six days uninterruptedly: extract of opium, grain ½ every two hours, pilocarpin muriate grain 1/6 subcutaneously every two hours, combined with rubbing the contracted muscles with belladonna ointment. At the end of the above period the seizures ceased, but delirium and increased diuresis appeared at the same time.

The delirium ascribable to the belladonna subsided with the use of paraldehyde, and complete recovery followed.

In the second case the only treatment was 1/6 grain injections of pilocarpin muriate every 2 hours for 8 days; the tetanic convulsions gradually decreased in violence and frequency, and ceased entirely six days after discontinuance of treatment.

The third case, a very severe form, resulted in complete recovery after fifteen days of the same treatment. —*Wein. Med. Woch. St. Pet. Med. Woch.*

Ingestion of Ascitic Liquid.—Probably the most remarkable potation on record is that of an inmate of the hospital at Obornay, France, who, after being tapped for the fifty third time, took advantage of an opportunity to drink off about eight ounces of the product of his own peritoneum, and with apparent relish. But what is more and stranger, his dropsy has not recurred within the year that has elapsed since he took the beverage, the œdma has been reduced, and he has been en abled to resume his employment. Dr. Duhamel is responsible for this narration in the *Gazette Medicale de Strasbourg.*

Dr. M. Sandruzky, director of the Children's Hospital of Jerusalem, states that he has successfully treated a boy who had had leprosy for two years. He also says that no one in that country believes in the contagiousness of this disease, and no case of contagion has been observed in that institution since 1867. There are about five hundred cases in Palestine.—*West. Med. Rep.*

SELECTIONS.

EXTRAORDINARY LONGEVITY.

The records prove that the following named persons have attained an age exceeding 125 years. The year designated in the left-hand column is the year of death. When not otherwise specified, the subject was a resident of the British Isles:

Year.		Age.
1759	Don Cameron	130
1766	John Delasomer	131
....	George King	129
1767	John Taylor	130
1774	Wm. Beattie	133
1778	John Watson	130
1780	Robt. McBride	127
....	Wm. Ellis	131
1764	Eliza Taylor	131
1775	Peter Garden	131
1772	Eliza Merchant	133
1772	Mrs. Keith	133
1767	Francis Ange	134
1777	John Brookey	134
1714	Jane Harrison	135
1759	James Scheille	136
1768	Catherine Noonan	136
1776	Margaret Foster	136
1770	John Miarait	137
1772	J. Richardson	137
1793	.... Robertson	137
1757	William Sharpley	138
1768	J. McDonough	138
1770	.... Fairbrother	138
1772	Mrs. Clum	138
....	Countess of Desmond	140
1778	Sworling (a monk)	142
1773	Charles McFinley	143
1757	John Effingham	144
1782	Evan Williams	145
1766	Thomas Winsloe	146
1772	J. C. Drakenberg	146
1652	William Mead	148
1768	Francis Confi	150
1542	Thomas Newman	152
1656	James Bowels	152
....	Henry West	152
1648	Thomas Damme	149
1635	Thomas Parr	152
1797	Joseph Surrington	160
1668	William Edwards	168
1670	Henry Jenkins	169
1780	Louisa Truxo	175
1820	Solomon Nibet	143
1822	Lucretia Stewart	130
1839	William James (South Carolina)	132
1846	Thomas Lightfoot (Canada)	127
1861	Marion Moore (England)	131
1869	.... Lockhart (Iowa)	127
1878	Eulalia Perez (California)	140
....	Edna Goodman (Arkansas)	127
1888	Granny Rose (South Carolina)	131
1889	.... Wapmarek (Germany)	126

The cases of Thomas Parr, Henry Jenkins and Louisa Truxo are the best authenticated of any in the list, notwithstanding that they are given as being among the oldest. In 1887 James James, a negro, living near Santa Rosa, Mexico, proved to the satisfaction of a number of doctors that he was 135 years old.

Induction of Premature Labor in Bright's Disease.—At the American Medical Association in the section on Practice of Medicine, Dr. James Tyson, of Philadelphia, read a paper on "The Induction of Prem-

ature Labor in Bright's Disease," and at the Baltimore Medical Association, of this city, Dr. J. B. Hundley read a paper on a similar subject. The great trouble with such cases is that it is generally impossible to say whether the renal trouble had existed before labor, before conception, or even before marriage, and even if albuminuria or casts are found at such an early date, it is not easy to foretell the results. Dr. Tyson suggested that every young woman contemplating matrimony should have her urine examined. This sounds very well, but if the urine be found abnormal it is not very likely that a marriage would be deferred or prevented. Again, if albuminuria and casts be found in the urine of a newly married woman, what will be the advice? The physician may suggest that she do not conceive, but it is hardly probable that the couple will follow his advice. Both writers suggest that premature labor be induced. This really seems to be the most easily carried out treatment, and it will often succeed, but perhaps the best manner of following this out would be to let the woman carry the child until some really serious symptom presents itself, meanwhile watching her general health and urinary secretion. It then will sometimes happen that after one, two or more prematurely induced labors that she will go to full term, and by bringing forth her first child gratify the most ardent wish of herself and husband.—Ed. *Md. Med. Jour.*

The Removal of Tattoo Marks.—In his letter to the *Journal of Cutaneous and Genito-Urinary Diseases*, March, 1889, Brocq refers to the plan of treatment practiced by Variot for the removal of tattoo marks. The method consists in freely painting the part with a strong tannin solution and then immediately pricking the skin with a bunch of needles, in order that the tannin may penetrate deeply. The operated surface is then rubbed vigorously with nitrate of silver. The pricked points in the course of a few moments become black, and the surface is then wiped off. Varying degrees of inflammation ensue, with more or less pain on motion. In about two weeks the eschar becomes spontaneously detached, beneath which is seen a red cicatrix. In due time the redness disappears.

The statement of Dupuy that the natives of the Indian Archipelago remove tattoo marks, without leaving a scar, by making tattooings with the juice of the carica papaya, is also quoted.—*Med Age.*

Spread of the Pasteur Method.—Bologna, following the initiative of Milan, opened, on June 30, an Instituto Anti-rabbico, or institution for the treatment of rabies on the Pasteur method. The King, the Prime Minister and the various civic and scientific bodies, as well as the townsfolk of Bologna, contributed the requisite funds. Every considerable Italian city will soon, it is anticipated, be provided with an institute of the kind.

THE DOCTOR.

[Sympathetically dedicated to the medical fraternity by a convalescent.]

Who works from morn till set of sun,
Is all day long upon a run,
And yet whose work is never done?
The doctor.

Who, when at last he seeks repose,
And falls into a gentle dose,
And makes sweet music through his nose?
The doctor.

Who's roused up in the dead of night,
By some one in a dreadful fright,
Who's sure she's going to die outright?
The doctor.

Who, when the days are scorching hot,
Can seek no cool, sequestered spot,
Because he must be on the trot?
The doctor.

Who must an even temper keep,
And hide his thoughts and feelings deep,
To cheer up those who wail and weep?
The doctor.

Who has to hear of countless ills,
And deal out multitudes of pills
To those who never pay their bills?
The doctor.

Who must be always very wise,
Ready to give profound replies,
Whatever question may arise?
The doctor.

Who, when the mercury is low,
Long, weary miles must often go
Through cutting winds and blinding snow?
The doctor.

Who must not show that it's a bore
To hear each family history o'er
Five generations back or more?
The doctor.

Who takes our aches and pains away,
And gives us courage day by day,
To cheer us on our healthward way?
The doctor.

Who should be placed among the saints,
Whom history with us acquaints,
For patient list'ning to complaints?
The doctor.

Minnie May Curtis, in *Inter-Ocean.*

Judge Rice, of Pennsylvania, has decided that: "A physician is not compelled to attend a post-mortem examination or a man mortally wounded, but when he does he cannot withhold his knowledge in a judicial investigation. It is a duty which he owes to the public, although there is no compensation attached to it. The remedy, in order to secure compensation, must be sought before the Legislature.—*Cal. Med. Jour.*

READING NOTICES.

WRITE to The Upjohn Pill & Granule Co., Kalamazoo, Mich., for samples and pamphlets of Upjohn's Friable Pills, and mention this journal.

SEND to Codman & Shurtleff, 13 Tremont St., Boston, Mass., for their catalogue of New Surgical Instruments, and mention WEEKLY MEDICAL REVIEW.

WRITE to James I. Fellows, 48 Vesey St., New York, for sample of their Hypophosphites, and mention the WEEKLY MEDICAL REVIEW. See ad. in this number.

SEND a postal to Eisner & Mendelson Co., 6 Barclay St., New York, for pamphlets and treatises upon the action of Carlsbad Waters, and mention WEEKLY MEDICAL REVIEW.

WRITE to Rumford Chemical Co., Providence, R. I., for sample of Horsford's Acid Phosphate, if you are not already acquainted with it, and mention WEEKLY MEDICAL REVIEW.

TARRANT'S Effervescent Seltzer Aperient, an efficacious and palatable aperient. A valuable saline for patients of Rheumatic or Gouty Diathesis. When corresponding mention this journal.

WE regard Bovinine as a most excellent tonic and reconstructive. Sample free. The J. P. Bush Manufac turing Company, 2 Barclay Street, N. Y. Write and mention the WEEKLY MEDICAL REVIEW.

LACTOPEPTINE.—You can procure a sample of this well known and reliable digestive agent, by writing to N. Y. Pharmacal Association, Box 1574 N. Y. City, and mention the WEEKLY MEDICAL REVIEW.

FAIRCHILD BROS. & FOSTER, New York City, received the silver medal at the Paris Exposition for their prep arations of their digestive ferments. Write for pam phlet and mention the WEEKLY MEDICAL REVIEW.

WE call your attention to Mariani & Co's. ad. on page 2. Write them for a treatise of 53 pages with de tailed description, dose, etc., which they will send free postpaid. Write and mention WEEKLY MEDICAL REVIEW.

LEHN & FINK, New York, will mail you a sample copy of their Notes on New Remedies on request. This firm is perfectly reliable and send out nothing but the purest and best of remedies. Write them, and mention this journal.

COLDEN'S LIQUID BEEF TONIC.—This article has won a most enviable reputation among intelligent physicians, in the treatment of all cases of general debility. C. N. Crittenden, 115 Fulton St., New York, is the general agent for this great food.

A PHOSPHORIZED CEREBRO-SPINANT.—I. O. Woodruff & Co., 88 Maiden Lane, New York, offer to send a half dozen samples of their preparations, on receipt of 25 cents to cover expense of delivery. Write them, and mention WEEKLY MEDICAL REVIEW.

IRRITABLE BLADDER ACCOMPANYING GRAVID UTERUS. —W. M. Wright, M.D., Huntingdon, Tenn., says: "I have found the Buffalo Lithia Water, Spring No. 2, a remedy of wonderful efficiency in cases of Irritable Bladder, accompanying Gravid Uterus."

SCHEFFER'S PEPSIN is the only pepsin that is not influenced by the weather, neither hot or cold, dry or wet. It does not become sticky, does not loose sts digestive power with age.

For digestive strength it compares favorably with the best in the market.

L. C. CARR, M.D., Professor Obstetrics Cincinnati College Medicine and Surgery, Cincinnati, Ohio, says: I have given Papine (Battle) a fair trial and am well pleased with its action, especially so in the case of an infant suffering with an attack of convulsions. Its action was speedy and safe.

IMPORTANT.—Every physician should read what is said about Sulfonal-Bayer, the new Hypnotic, and Phenacetine-Bayer, the new Antipyretic, and for information write W. H. Scheiffelin & Co., New York, for their pamphlet on the above preparations, and mention WEEKLY MEDICAL REVIEW.

AFTER a careful investigation of the different infant's foods on the market, in the children's ward of Randall's Island Hospital, Malted Milk took the first place. A sample will be furnished free on application to the manufacturer, by mentioning this journal.

MALTED MILK CO., RACINE, WIS.

THE DAY of mercurials as blood alteratives is past, and vegetable alteratives have now universally taken their place. The SUCCUS ALTERANS (McDade), manufactured by Eli Lilly & Co., of Indianapolis, is a rare product, and is winning laurels wherever used. Their Elixir Purgans is also valuable.—*Chicago Medical Times.*

WE ARE pleased to learn that the Waite & Bartlett Manufacturing Company, the successors of the well-known firm of Waite & Bartlett, who for many years have manufactured electro-medical batteries and intruments, have recently established an agency in the cities of Pittsburg and Cleveland for the sale of their specialties, and that they will soon have one in Chicago and St. Louis. The cabinets and static machines manufactured by this enterprising company are used by the best known physicians in the country, and their smaller portable batteries are highly endorsed. Prices and full description mailed on application to Waite & Bartlett Manufacturing Co., 143 East 23d St., New York.

WILL IT CURE?—Dr. Allen of Peterboro Has a New Remedy for Diphtheria.—The subject of diphtheria, its prevention and cure, is one that is of great interest just now, when the dreaded disease is so prevalent in certain parts of the country. Dr. Allen of Peterboro, N. H., thinks that he has found a cure that will reach even very bad cases, and he has had opportunity to test it, with excellent results in every case. He stumbled upon it, as it were, entirely by accident. He had a severe case of diphtheria under his care, the patient being a young boy. The doctor was using Platt's Chlorides as a disinfectant and the boy took a fancy to the odor and asked to have some near his nose. The doctor would hardly have acceded to the request, but it seems that the boy's grandmother saturated a handkerceief with the disinfectant and put it on the child's face. At this time the membrance peculiar to diphtheria had formed nearly up to the teeth and Dr. Allen considered the case a hopeless one. That night after the application of the Chlorides, holes appeared in the membrane and in the morning the membrane had disappeared The boy lived. Dr. Allen says that he has had several cases since then that were very bad and he has not lost one. He had used this remedy in these cases.

The directions which are given are: Dilute the Chloridet with ten parts water. If used to prevent the disease, wet a cloth in the liquid and place it over the mouth and nose for about ten minutes at a time several times in the day. If used to cure the disease keep the wet cloth over the face nearly all the time until the membrane is gone.

Should any physician desire to test Platt's Chlorides in this connection, Mr. H. B. Platt, 36 Platt St., New York, will gladly furnish a sample free by express.

PHYSICIANS AND FINANCIERS.—For the last twenty five or thirty years, efforts have been made to simplify the business books of physicians, so that as little time as possible would be required for a medical man to enter his charges, and keep something like a systematic account of his business. It has been found impossible for one engaged in the active practice of medicine to keep what is called a day-book, cash-book and a ledger, for with such a set of books, oftentimes not having time to enter any charges for two or three days, he will frequently forget many items. Then again, frequently he will let his ledger go unposted for weeks and months, and when called upon to make out a bill, he will in consequence, not be able, and will be under the necessity to ask the applicant to call again.

Visiting lists have been constructed to enable physicians more easily to keep account of their services; and they have certainly been of great use. We feel sure that, through them, we have saved many dollars, which without them, we would have lost.

Henry Bernd & Co., St. Louis, Mo., are publishing one of the best Physicians' Registers in the trade. See their ad. in this number. Write for sample pages, and mention the WEEKLY MEDICAL REVIEW.

WARNER'S ANTISEPTIC PASTILLES—Following a suggestion recently made by Dr. C. Seiler in the *Medical Record*, Messrs. William R. Warner & Co., the well known pill and compressed pastille manufacturers, of Philadelphia, are now placing on the market antiseptic pastilles for the treatment of certain nasal affections. These pastilles are not only powerfully antiseptic and comparatively innocuous, but also distinctly deodorant, as sodium bycarbonate, sodium biborate, sodium benzoate, sodium salicylate, menthol and oil of wintergreen enter into their composition. One of the pastilles makes 2 oz. of a lotion or spray for the nostrils, and it is, according to Dr. Seiler, "sufficiently alkaline to dissolve the thickened secretion adhering to the nasal mucous membrane, and as it is of proper density, it is bland and unirritating, leaving a pleasant feeling in the nose. As an antiseptic and deodoriser it is also far superior to Dobell's solution or any other non-irritating deodoriser and antiseptic." The pastilles are introduced here by Messrs. F. Newbery & Sons, of King Edward St., London, E. C.—*The Chemist and Druggist.*

List of prices sent on application to W. R. Warner, Philadelphia.

MINER & ELBERG.—Manufacturers of The Perfection Physician's Chair, 224, 226, 228 and 230 South Delaware Street, Indianapolis, Ind. The Perfection Physician Chair, a recent development in the line of surgical appliances, has met with the universal commendation of the profession since its introtuction at a recent period, to whom it has since been known as "The Perfection" in every respect. Its purpose is to facilitate the conduct of examinations and operations with the least inconvenience to both patient and operator, and the evidence of its efficiency and value is daily attested by the demand for them from all portions of the country, as also by the testimony of physicians surgeons, oculists and specialists throughout a territory as widely distributed. In appearance it resembles a handsome parlor rocker. Its mechanism is so arranged as that its operation is simple, easy and perfect; after the patient is seated in the chair, the latter can be adjusted to any desired position, without the slightest annoyance to the occupant or operator, and so balanced that the patient properly seated therin can recline at any angle without assistance, the operator being only required to secure the chair at the proper angle.

Mr. Elberg is also the inventor of other surgical chairs, and has the benefit of years of experience in their manufacture. The business is managed upon the most liberal and honorable principles, and a large trade is done throughout the United States in every direction. Full description made on application.

DR. H. TUHOLSKE, Professor of Clinical Surgery and Surgical Pathology, Mo. Med. College, also Professor of Surgery and Diseases of the Genito Urinary Organs, St. Louis Post-Graduate School of Medicine, writes: "After an extended experience I am able to say that

with KATHARMON there is added to our list a preparation of decided elegance and great efficiency. It is an antiseptic of considerable power, yet mild, pleasant, non-irritating and non-poisonous. It has quite a range of applicability, and I have used it with satisfactory success in catarrhal affections of the mucous membrane of the mouth, throat, nose, etc., and as a dressing for fresh wounds and of foul ulcers, and as a douche for offensive discharges. We are indebted to the KATHARMON CHEMICAL Co., of St. Louis, for the introduction of this valuable preparation."

THE CHURCH CART Co., of St. Paul, Minn., Manufacturers of Road Carts, Carriages, Harnesses and Medicine Cases for physicians whose advertisement appears in this journal, make a speciality of their work and the geneaal approval of their work by the medical profession has given them not only a National reputation, but quite a foreign trade. Their long experience with railroads has placed them in a position to deliver their work as cheap as is possible to be done.

They have a large trade through the South and West and every vehicle is shipped out with care.

Their orders are from every State and Territory as well as from Canada, Cuba, Mexico and Japan. They are prepared to fit out the busy practitioner with a fine vehicle, either two wheels or four, and harness to dress their horses, a fine case to carry their medicines and in fact everything except the horse and the vest pocket so commonly used for carrying pills, so cheap that it is a great saving to that garment.

MESSRS. WM. H. ARMSTRONG & Co., Surgical Instrument Dealers at Indianapolis, Ind., have been giving special attention to the manufacture of Aseptic Instruments and Cases, and have produced several things in that line that seem worthy of attention of the profession. Their Aseptic Pocket Case is very compact and complete and meets all the modern requirements of the surgeon as a constant companion piece, while for Railway Surgery their General Operating Set in Patent Satchel-case is all that could be desired. In the line of Orthopedic Appliances they keep abreast of the times, and guarantee every piece of work that passes through their hands. They prefer that the orders for such work should come to them from the surgeon in charge of the case, and therefore do not solicit it in any other way. This is a point in their favor which we think the physicians will appreciate. Prices will be furnished on application.

A PHYSICIAN can time a pulse without a watch, but he cannot be very accurate. A physician can also apply galvanic electricity to a urethral stricture or to the urethral surface of the uterus without a milliammeter, but he will have but little knowledge either of the strength of the current or even whether the current is passing or not. For the electrolytic use of galvanic electricity, as well as electro-diagnosis, the milliammeter has become a necessity. The milliammeter made by the McIntosh Battery and Optical Co., of Chicago, Ills, is one of the best on the market. It has won well-deserved praise from specialists who have used it. Prof. Sperry, one of our best electrical experts, pronounce it accurate and free from the objection of great resistance. Full description made on application to McIntosh Battery Co., 141 Wabash Avenue, Chicago.

PLANTEN'S CAPSULES have been before the profession for over half a century, and have acquired a very enviable national reputation for standard and uniform reliability.

No druggist considers his stock complete without a line of Planten's Capsules; such as Copiaba Pure, Compound Copiaba and Cubebs, Castor Oil, or some specialties Sandal Pure and Sandal Compounds, Terebene, Engerm, Beechwood Creosote, Iodide Ethyl, etc., Send to H. Planten & Son, 224 William St., New York, for their detailed formula lists, and be careful always to specify Planten's Capsules when ordering through your wholesale dealer.

LISTERINE.—"Offensive odor of the breath, due to bad teeth or other causes, may be overcome, or at the least greatly abated," says the *Sanitarian* "by the habitual use of listerine. Add a teaspoonful to a tumblerful of water for a mouth-wash, and if a little is swallowed, so much the better. Indeed, a bad breath is not infrequently caused by the gaseous eructations of indigestion, and for this also, listerine is an excellent remedy, in doses of twenty to thirty drops in a little water."—*New York Med. Jour.*

MESSRS. REED & CARNRICK—*Gentlemen*: I have been much interested in the study of the milk question as it effects infants who are deprived of their mother's breast, and have discussed it editorially and otherwise. This summer I have had the question forced upon me practically, as the result of the illness of my wife, necessitating the weaning of our baby and supplying her with some artificial substitute. I have thus given a practical test of Carnrick's Soluble Food and have been perfectly satisfied with the result, as our little one has thriven on that food, I think as perfectly as if the mother had been able to nurse her. Though this has been her "second summer" she has not had any disturbance of digestion or tendency to diarrhœa.

DR. E. M. NELSON.

DRINK THAT IS HEALTHFUL.—Used by the public for 100 years with ever-widening popularity, ought to be sufficient proof of the excellence of an article of food. Such is the testimonial submitted to the good sense of housekeepers by the proprietors of Walter Baker & Co.'s cocoa. Of the legion who cannot drink tea or coffee steadily without deleterious effects, probably nearly all have tried this article, and thousands have from choice substituted it permanently at the table for the less nu-

tritious drinks. It is a healthful, refreshing, and delicious beverage. Its vastly increased consumption has enabled its proprieters to place it upon the market at a lower price than ever before, while guaranteeing that its established reputation for absolute purity shall remain unimpaired.

IN THE treatment of pulmonary phthisis, the cough, the hectic fever, and night sweats, all claim the practitioner's careful attention. But the patient also lacks vitality and all his powers must be sustained by the use of such nourishment as he can, in his diseased condition, assimilate. Milk with the addition of Mellin's Food, or beaf tea, cold, with Mellin's Food will do excellent service. In addition to their nourishing properties, they will alleviate the distressing thirst which accompanies the fever. For the latter trouble, lemonade with Mellin's Food gives certain relief. Pamphlet, commendations, etc., mailed on application to Doliber, Goodale & Co., 53 Central Wharf, Boston, Mass.

THE 1889 report of the Brooklyn, N. Y., Board of Health announces that Nestle's Condensed Milk prepared in Switzerland is the only condensed milk prepared from unskimmed milk. Physicians who are not only prescribing condensed milk for their patients, but use it on their own tables, would do well to investigate the accuracy of this report.

THE ARCHER MANUFACTURING COMPANY of Rochester, N. Y., so long and favorably known to the medical profession, have improved their Gynæcological Chairs, so that they are the most perfect operating chair in the world. Doctors in need of such an article would do well to write and get their prices *and special discount for cash.*

They will also sell chairs on time to parties that will furnish satisfactory references. There is no need of any doctor being without this valuable and very necessary article of furniture. It will pay our readers to write them at once, mention the WEEKLY MEDICAL REVIEW, and get illustrated price list and special discount.

IN PRESCRIBING the products of Manufacturing Pharmacists, we should be guided to a great extent by the business standing of the manufacturers. No other house in the South or West has a better reputation for strict integrity than the firm of R. A. Robinson & Co., Louisville, Ky. We do not hesitate to recommend the preparations advertised by them on page 13, this issue.

WHEELER'S TISSUE PHOSPHATES.—This is a combination of great reliability and efficacy. It has been very highly recommended by the medical profession, both at home and abroad, wherever it has been tried. We have used it in many cases of indigestion, nervous prostation, chlorosis and anæmia, and we have no hesitation in giving it our unqualified recommendation. We have, therefore, great pleasure in calling the attention of the profession to a preparation so worthy of confidence, and so reliable in the treatment of convalescing patients, and all diseases attended with debility of the nervous and muscular system.—From the *Lancet*, J. Fulton, M. D., Professor of Physiology in Trinity Medical College, Editor, Author of Text-Book of Physiology.

TEN BABIES.—We have received a handsome collection of plates from Wells, Richardson & Co., Burlington, Vt., proprietors of Lactated Food for Infants and Invalids. These pictures show ten babies, single, twins and triplets, who all owe their vigorous health to a diet of Lactated Food. This firm ask us to advise our readers that a set of these pictures will be sent to any physician who mention the WEEKLY MEDICAL REVIEW.

They will also send a sample of Lactated Food, sufficient for trial, all charges paid, to any physician unacquainted with its merits.

IN WRITING to Dr. McArthur of the Syrup Hypophos. Comp. C. P., John Dixwell, M.D., General Agent Massachusetts Society for Lost, Stolen and Abused Children says: "Let me say that your Hypophosphites have done more for three little broken down children, who have come under our care of late, more than we ever expected of your preparation before. We do not want better results. Write for pamphlet and mention WEEKLY MEDICAL REVIEW.

THE Chas. H. Phillips Chemical Co., of New York, advertise their Cod Liver Oil Emulsion and their Phospho-Muriate of Quinine in this issue. We hardly think it necessary to more than call the attention of our readers to these standard preparations, as the profession is already well acquainted with their merits. We are gratified at the cordial and growing support accorded them.

THE following excellent medicinal agents are prepared by Emile Duriez & Co., Paris, France: Rigollot's Mustard Paper which obtained a medal at the Centennial Exposition at Philadelphia; Ducro's Alimentary Elixir, a combination uniting the properties of Alcoholic stimulants and Raw Meat; Blanchard's Pills containing Unchangeable Iodide of Iron. Write to E. Fougera & Co., William Street, New York City. Agents for the United States, and mention this journal.

CAMPHO-PHENIQUE.—W. E. Miller, M.D., 1111 South California Ave., Chicago, Ill., says: "I received a sample of Campho-Phenique some time ago. Iit tried on a cut finger, and found that while the wound discharged pus so long as dressed with iodoform, as soon as I began using Compho-Phenique it became clean and healed very rapidly. I then got a larger quantity, and have since been dressing all manner of wounds with it, with the happiest results. It is the best antiseptic in use, and should be in every surgeon's case. I would not be without it." Write to Phenique Chemical Co., St. Louis, for sample, and mention this journal.

ORIGINAL ARTICLES.

MEDICO-LEGAL RELATIONS OF SHOCK.

BY HAROLD N. MOYER, M.D., CHICAGO, ILL.

There is no question of greater medico-legal interest than the cause of death, and in many cases it is one of the utmost difficulty. The post-mortem examination when taken alone is often wholly inadequate to answer this question; when illuminated by a complete clinical history valuable light is thrown upon obscure or unimportant post-mortem appearances. Unfortunately in too many cases we have little but the observations made after death and from them we must attempt to reproduce certain facts and occurrences that have taken place days or weeks before. The cause of death in a given case should be predicated upon all the evidence obtainable. In many cases the post-mortem findings alone are too incomplete upon which to base an opinion; and in all these doubtful cases a guarded expression should be used. While we may indulge in fine-spun theories and carefully formed classification, the law on this matter is exceptionally plain, it simply asks, "did the wound or injuries inflicted shorten the life of the person?" If from disease a human being would have died at a particular hour, and if from the infliction of injuries life is shortened but a few minutes the one who inflicts these injuries is a murderer. It is plain that this very explicitness but adds difficulty to many cases. Whatever theory the law may hold regarding the scope of expert testimony, a certain portion of the case is decided outside of the court room. It is true that it may be reviewed there, but the physician who makes a post-mortem examination should ever hold in mind the rules which govern legal evidences. He is not to base his opinion solely upon the preponderance of evidence but if from all the facts it appears that there is a reasonable doubt that the injuries received caused the death of the person this reasonable doubt should appear in his opinion and he should decide that death resulted wholly or partially from natural causes—a reasonable doubt is always to be interpreted in favor of the accused. It makes a vast difference whether an opinion of this sort is expressed in the terms of a negative or positive proposition; either way shifts the burden of proof and changes the whole aspect of the case.

In the vast majority of cases when death is attributed to shock the injuries are direct, severe, and for the most part are accompanied by some lesion of vital or important organs. These cases give rise to but little discussion, as death follows in such a direct causal relation to the injuries that it is acccepted as a natural sequence. When, however, injuries are inflicted that have a tendency to cause death but do not do so from direct injury of a vital organ, then we have doubt, uncertainty and more or less learned dissertations.

It is manifest that injuries must of necessity have two results in causing death, either by immediate shock (surgical shock) or by their remote and secondary consequences, such as hæmorrhage, inflammation, abscess, septicæmia, fat embolism, etc. If death cannot be traced to one of these conditions some other cause must be sought. Of the first form, a case may be cited which bears directly upon the question of shock when no important organ was involved. The protocol of the post-mortem examination was substantially as follows: Body that of Robert Burns, æt. 50 years, weight about 150 pounds. Nutrition had been poorly maintained, muscular tissue flaccid. On the outer surface of left arm seven inches below the shoulder joint was a contusion one and three fourths by two and a half inches, with extravasation of blood into the skin and subcutaneous tissue. On the outer surface of the right arm just below the shoulder was a livid patch, two by two and one-half inches in area, yellow around the borders. On the left side of the chest over eleventh rib on a line with the anterior border of the arm pit was a contusion black and blue in color, two by two and one-half inches. A large contusion eight by twelve inches on anterior lower part of abdomen and left hip, extending around upon the lateral surface. The tissues were filled with effused blood extending to the fascia lata upon the hip, and through the abdominal muscles upon the anterior and lower portion of the abdomen. The tissues were pulpified and sodden. The surface of the injured part in the whole extent as given was black and blue in color. The sternum was fractured at the attachment of the fourth costal cartilage. Blood extravasation was found in the line of fracture, and in the tissues above and beneath it. The left twelfth rib was fractured. The kidneys showed a small amount of fat. Liver fatty. Dura-mater adherent throughout and thickened. Heart contained a small amount of fluid blood.

The opinion advanced in this case was that death was caused by shock from the injuries and bruises received. As one physician expressed it, "I believe that the death of said Robert Burns resulted from the injuries above described and that it was a consequence of shock produced by the injuries and subsequent prostration."

A second physician was asked: "In your opinion what was the death caused by?" Answer.—"Shock." Question.—"How produced?" Answer.—"By injuries received on the body." It is significant that a third physician present at the autopsy insisted upon qualifying his opinion, in the following terms: Question.—"In your opinion what was the cause of his death?" Answer —"In the absence of any other obvious cause of death it would seem that the contusions and fractures found upon his body would have a great deal to do with his death." To the charge of the coroner that this answer was ambiguous he said "it might perhaps be, but not knowing the history of the man's diseases before he died, I could not give any more definite opinion."

In the trial it was admitted on cross examination that the injuries were several days old at the time of death,

as was shown by the color changes in the extravasated blood. The bruise on the abdomen was admitted to have been produced possibly five days previous to death. In the light of this statement, what weight is to attach to the opinion that death was caused by shock? This raises the highly interesting question of the duration of shock. A large number of standard authors have been examined in reference to this point, but not one of them gives in hours or days the possible limit of the duration of shock. Four physicians were examined for the defense in this case, and in reply to the question as to the possible duration of shock, answered unanimously, twenty-four hours. All writers are agreed in regarding shock as immediate in its consequences, and, while they do not place a time limit upon its duration, by inference at least they state that shock is either recovered from or passes rapidly into other conditions. Savory says, in speaking of the varieties of shock: "The concatenation of symptoms, often called delayed shock, is, in my opinion, due to a very different pathology. The very essence of shock is its immediate production before inflammation, septicæmia, suppuration or fat embolism can occur."

It is manifest in this case that had death resulted from shock the color changes in the extravasated blood would not have had time to take place. If death was not caused by shock then it must be attributed to the secondary consequences of the wounds, but they were *nil*, so that death cannot be attributed with absolute certainty to the wounds. The other factors in the case were that Burns, at the time of his death, was suffering from an exhaustional, confusional form of insanity, complicated by chronic alcoholism. There had been refusal of food and progressive failure of all the vital powers for some weeks, a condition the natural tendency of which is toward death. In addition they alleged that in these cases there was often marked vascular and osseous degeneration, so that in the ordinary legitimate restraint of an insane patient ecchymoses were produced,in extent and depth out of all proportion to those occurring under similar conditions in a healthy person; the bones, too, were more fragile and liable to spontaneous fracture.

An important factor in the diagnosis of death from shock is the condition of the heart. Savory says: "After death the heart is found full of blood, all its cavities are distended, although this is most obvious in the auricles and right ventricles, the left ventricle not so readily yielding." This coincides with my own observations; in every ease where death resulted from pure and uncomplicated shock, without hæmorrhage, the right side of the heart has been uniformly distended with fluid and clotted blood. These observations confirm the experimental work of Goltz,[1] who found that a succession of slight blows upon the abdomen of the frog caused a uniform stoppage of the heart in diastole, with its cavities fully distended. These experiments were repeated by Max Schrader (*ibid*), who demonstrated that the effect was produced by direct action upon the ganglia within the heart, and not through the central nervous system.

What is known as the Hetzke case is one of great interest. The post mortem examination was upon the body of a lad, about 14 years of age. Body thin and poorly nourished, subcutaneous fat much wasted. A large number of superficial ecchymoses were found, principally upon the back, arms and posterior aspect of the thighs; none of the bruises extended deeper than the lower layers of the skin. They were of a uniform dark red or reddish purple color. From forty to sixty marks could be identified as having been made with the same instrument, which was subsequently found to correspond with a large iron buckle, attached to a strap, found upon the premises. The post-mortem findings were absolutely negative to both macroscopic and microscopic examination; all the organs appeared to be healthy. The heart, especially the right auricle and ventricle, was enormously distended with fluid and clotted blood; the auricle appeared as though it were ready to burst. The opinion advanced was that the lad had died from shock, the evidence showing that he was alive as late as 10 o'cl'k the night preceding his death,and that cries were heard, presumably his, during the night, which ceased at 2 or 3 A. M., some five hours before the body was found. The diagnosis of shock was based upon the absence of any other possible cause of death —the condition of the heart, the time that elapsed, as shown by the evidence, the condition of the ecchymoses and absence of color changes in the extravasated blood. The opinion was not controverted and the accused was convicted.

What, then, are the indications upon which to base a diagnosis of shock?

First, duration. If the injuries have been inflicted more than twenty-four hours, we are scarcely justified in attributing death to this cause.

Second, the condition of the heart. If empty and contracted, it is strong negative evidence against the theory of shock.

While I do not feel like formulating this as an absolute conclusion, yet all the evidence I have collected supports this view, and there is nothing against it in the literature of the subject.

Third, are the injuries in their nature and extent sufficient to cause fatal shock?

In the case of Burns only the last condition was fulfilled. In the Hetzke case all the essential factors were present. We must not forget the gravity of these injuries, and the fact that a certain and varying degree of shock accompanies all of them. The error is in establishing shock as the absolute cause of death when it is only one of several concurring causes, the relative importance of each varying in different cases. This relation is well expressed by the German authors in their *Concurrirende Todesursache* (Shagngka).

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1. Quoted by Max Schrader, Inaug. Diss. Strasburg, Schmidt's Jahrbucher, B. 211, p. 10.

A REPORT OF A SERIES OF ABDOMINAL SECTIONS, WITH SPECIAL REFERENCE TO COMPLICATIONS.

BY JOSEPH HOFFMAN, M.D., PHILADELPHIA.

In bringing this report before the Society, my object is not to apologize for results, nor to explain failures, except so far as they may be made to offer escape from discovered error in operation. The list includes a series of thirty three operations, consecutively performed. None are omitted. Selected cases are well enough for any *eclat* they hope to gather about them, but they teach nothing and record nothing but the good fortune of the operator, and leave nothing for comparison whereby his work may be truly estimated. I believe that selected cases are commonly selfish advertisements. A report of a number of hysterectomies, all successful, saying nothing about nearly an equal number that have been failures, can be only misleading. This is true of all other operations where failure may teach as much, nay more, than success.

The list of operations may be classified as follows: one strangulated hernia, one appendicitis and hæmatocele, sixteen cases of ovarian and tubal disease with adhesions, inflammation, and occlusion of the tubes, with one death, the result of sepsis. Where the infection came from, for a long time puzzled me. Months after the death I learned that the patient had had a miscarriage brought on instrumentally, and the mystery was solved. In other words, I believe the tubes were septic and gave rise to the peritonitis.

By this case I believe there is sufficient learned to warrant the practice of cauterizing the tubes after ligation and section in all doubtful cases where there is the least suspicion of infection. If this is not done, they should be thoroughly disinfected and the abdomen drenched. I have had no other death from like cause, or from peritonitis from any cause. Six cases of pyosalpinx; one occurred during pregnancy, and the operation was done to save life. The woman miscarried the fourth day after the operation, but made an excellent recovery, though her pains were very great during miscarriage, and were only controlled by the free use of morphia and atropia. All cases of pyosalpinx recovered. They are all working in comfort, save one, who has lately died of tuberculosis. This last case is strongly in support of Bernutz's view, that pus in the tubes is a forerunner of general tuberculosis.

In two cases the gonorrhœal origin of the pyosalpinx is well established; in two the history points to postpuerperal origin; in the remaining two the origin is doubtful, though in one of the cases I strongly suspect a specific start.

One died of shock—never coming out of anæsthetic. She was a hard drinker.

In two cases the tumor removed was dermoid. Both were small. In one of these cases the uterus was rudimentary, though the woman had for a long time worn a pessary for a so-called displacement, introduced by a specialist in gynæcology.

There is sufficient commentary here on the use and abuse of pessaries without further remark. In two cases exploratory incision was made. In both, the women recovered quickly. One of these soon after died after tapping; from what cause, I do not know. I visited her for a day or two after tapping her, and was told that the patient was feeling so well that no further visit was necessary. In a week or thereabouts, I learned of her death in the hands of another. The whole air of the matter was unsavory, and I am not sorry to remain in ignorance concerning it. The second exploratory incision was due to an error in diagnosis. The uterus was retroverted, a miscarriage having occurred a short time previously. There was a peculiar thickening of the right broad ligament, which immediately led to the blunder. I examined the patient on my table soon after her recovery, and had I not known that I had erred before, the condition was such that I would have done so again. Two small ovarian cysts; both recovered. One case of omental hernia, one case of extra-uterine pregnancy. One case of operation for adhesions due to previous operation. The result has now a greater measure of success than I hoped for a short time ago.

The drainage tube was used in fourteen cases. I believe I would have had a better chance of saving one of my deaths had I used it. I have never had a death from its introduction. I have had but one fistula persisting after its use, and this now gives every sign of closing. In only one case has there been a discharge of the ligature. The patients operated upon are now all living but four. They are all able to do their work comfortably save two. One case, I believe, is reported to have had another operation. She was a most ungrateful baggage, and I trust she will tarry a long time on earth for the experience she will bring to others. I have had one case of hernia after simple section. The woman was fat, and neglected her bandage. In two cases where it existed previously to operation it still is present. I did not really operate for its cure. I have found drainage and flushing the abdomen to be of the greatest service in cleansing the abdomen of debris, and believe them indispensable. Free saline purgation, or, when the salts are not retained, mercurial purgation, is of the greatest benefit in severe wind-pains. These are probably more frequently the cause of pain soon after the operation than inflammation, though there is no doubt that here, also, these purges are of undoubted value. In the question of diagnosis, I find it is much easier to say there is a lesion than to map it out exactly or to define it. I have found marked trouble in cases where expert examination pronounced disease absent; in others, where one thing seemed to be the trouble, another was found present. So far as pain is concerned, it does not always indicate the spot of the lesion. I have found one side the most diseased when it was freest from pain.

In the thirty-three operations recorded, two deaths

have occurred. No patient was operated on by myself more than once. The first death occurred early in the series. In the last twenty-six cases there has been but one death. The last eighteen cases have been without death.

TRANSLATIONS.

THERAPEUTIC BATHS.

BY DR. P. LEGENDRE.

Translated by Gerolt Gibson.

Baths may render the greatest service in the treatment of infants. The changes which they effect in the system may depend either upon their temperature or the medicinal ingredients of the bath.

As regards the temperature baths are termed cold below 68° Fht.; fresh from 68° to 77°; tepid from 77° to 86°; hot from 90° to 104 (Diel and Wetzler).

Considerable benefit may be gained by the gradual elevation of temperature, but the gradual lowering of the temperature is especially advantageous.

The gradual cooling of the bath, which my instructor, Prof. Bouchard, has made one basis among others for his treatment of typhoid fever, has not been sufficiently used with infants in other extreme febrile diseases. Having learned by his instruction, I have had occasion to flatter myself several times for using this method in typhoid fever, malignant scarlatina and cerebral rheumatism.

Ellis, who also advises the cooling of the bath, says that "the infant should first be immersed in water at 95° which is afterwards lowered within about thirty minutes to the temperature of 70°; and even lower if necessary by adding cold water."

I have always employed the method of M. Bouchard and believe it is preferable: place the infant in a bath at four degrees below the rectal temperature of the patient (for instance the bath would have a temperature at first of 100° if the patient had 104°); every ten minutes lower the temperature two degrees by adding cold water and take the infant out when the bath has been reduced to 86°. Below this temperature shivering would commence and a collapse might ensue.

The infant is then enveloped in a woolen blanket, put back to bed and rubbed vigorously, at the same time a jug of hot water placed at its feet. This method of bathing invariably results with the great advantage of a thermal reduction which sometimes is not more than one degree, but usually is two degrees, sometimes four and even five degrees; this decrease of temperature is obtained without disagreeable sensations, without any nervous shock, or fear of a collapse. The infant may thus without struggle be made to take several baths within 24 hours. They are beneficial, as I have already said, to fever patients, especially at the commencement of eruptive fevers when the exanthema is slow in appearing, in cerebro-spinal complications from the infections.

Baths of an increasing temperature may be employed sometimes to heat up patients in a state of icy collapse. I have employed them in cases of choleraic enteritis,and with an infant that had been half frozen, having passed a night in winter without protection under the snow. In such a case great precaution is necessary, and it is well to follow the bath (which should be heated slowly and not prolonged over half an hour) with an alcoholic rubbing; the application of bandages soaked in cold water upon the head and the nucha will counteract the tendency to cerebral congestion.

Medicated Baths.—An action may be obtained, local or general, sometimes both together.

A local action is sought after in certain skin-diseases or in cutaneous affections arising from general disease; the following sorts of baths are thus employed—sulphurous, starchy, alkaline, gelatinous, glycerine, mercurial and arsenical.

The following are some formulas which I take from Ellis and various authors.

SULPHUROUS BATH.

Sulphide of potassium, - - grs. 60.
Warm water - - - quarts, 45.

Bath tub of wood, zinc or cast enamel.

GELATINOUS BATH.

Gelatine, - - - - grs. 120.

Add enough warm water to dissolve and mix the whole with about 20 quarts of water.

ACID BATH.

Nitric acid, - - - - grs. 30.
Hydrochloric acid, - - grs. 60.
Warm water, - - quarts, about 60.

The bath must be prepared in a wooden bath tub. Length 10 minutes.

ALKALINE BATH.

Carbonate of soda, - - grs. 100.
Water, - - - - quarts, 60.

BATH OF GLYCERINE.

Glycerine, - - - - grs. 150.
Gum tragacanth, - - - grs. 50.

Boil in a quart of water, add 20 quarts of warm water.

ARSENICAL BATH.

Arsenate of soda, 5 to 10 grains for one bath. May be useful in certain skin diseases not acute but torpid, and in certain knotty sorts of rheumatism.

MERCURIAL BATH.

Bichloride of mercury, - grs. 0, 50 c.
Alcohol, - - - - grs. 8.
Distilled water, - - - grs. 30.

Pour this solution in the water of the bath. It is not to be forgotten that the baths of sublimate, although truly useful against cutaneous syphilitic affections, do not take the place of the internal treatment.

The general action of the medicated baths may have the result of awakening a reaction of the nervous system briskly or gently, or to stimulate it if torpid, or to quiet it if too excited.

Some of the medicated baths act immediately upon the nervous extremities of the skin; such is the case with baths prepared with mustard, salt, iron, astringents; others by the exhalations which are thrown out, as with baths containing alcohol, wine, sulphur, iodobrome, valerian, linden and other aromatic species.

MUSTARD BATH.

Mustard flour, - - - grs. 60.
Warm water, - - quarts, 20.

The infant should be immersed quickly—except the head of course—left in but a few seconds, taken out as soon as the skin gets red and replunged several times successively.

Apropos to this bath as well as to all medicated baths containing irritating substances caution is recommended not to let any drops of water splash in the eyes.

FERRUGINOUS BATH.

Sulphate of iron or citrate of iron ammoniac, - - - - grs. 15.
Water, - - - - quarts. 20.

Pour into the water of the bath.

ASTRINGENT BATH.

Bark of quinquina or oak, - grs. 150.

Boil a half hour in ½ quart of water and strain through a sieve. Pour the decoction into the water of the bath.

A decoction from the leaves of the walnut tree is astringent in a less degree.

IODINE BATH.

Iode - - - - - grs. 60.
Solution of potash, - - - grs. 15.
Water, - - - quarts, 30.

BATH OF BROMINE.

m - - - - drops, 5.
Iodide of potassium, - - grs. 15.
Water, - - - - quarts, 30.

BATH OF VALERIAN.

Root of valerian, - - - grs. 4.
Boiling water, - - - quart, 1.

Allow to steep; then pour into the bath.

BATH OF LINDEN.

Linden flowers - - grs. 250 to 500.

Allow to steep for one hour.

AROMATIC BATH.

Aromatic species (leaves and tops of absinthium, hyssop, peppermint, wild marjoram, rosemary, sage, mother of thyme), - - - - kilogr. 1.
Boiling water, - - - quarts, 12.

Allow to steep for an hour, strain and mix with the water of the bath.

SALT BATH.

Common salt, or spring-water of Salius or Salles-de-Berrn. Quantity variable.

The indications for the baths of valerian, linden and aromatic species are conditions of nervous disorder (St. Vitus' dance, cerebral irritation) reflex eclampsia, etc.

Salt, sulphurous, iodine and bromine baths are good for lymphatic troubles, tubercular scrofula.

Alcoholic or wine baths are indicated by adynamic conditions, collapses or infantile cholera.—*Le Concours Medical.*

Diagnosis of Cerebro-Spinal Meningitis by Puncture of the Liver.—Dr. C. Bozzolo reports in *La Riforma Medica* an interesting case of cerebro-spinal meningitis, in which the diagnosis was assisted by bacteriological observations made on the fluid obtained by puncturing the liver. A man aged fifty-four, who had been ill for fiive days previously, was admitted into the clinic at Turin suffering from feverishness, pain in the right side of the neck, jaundice, enlargement of the spleen, painful enlargement of the liver, bronchitis, and albuminura. A rigor occured more than once. Except the pain in the neck and vomiting, no sympton whatever of meningitis existed. Six days after admission the patient died, having been slightly delirious for the previous forty-eight hours. Diagnosis being difficult, the author had on the fourth day after admission made an exploratory puncture of the liver, which was still painful. The blood extracted showed by cultivation and after-experiments on animals the existence in it of Fraenkel's diplococcus of pneumonia. This with the existing pains in the neck and vomiting, encouraged Bozzolo to diagnose meningitis, a diagnosis which was confirmed by the post-mortem ezamination. In addition to the the morbid changes in the meninges, gall-stones and acute endocarditis were found —*Lancet.*

A Dog without a Brain.—At the last meeting of German neuorlogists, held in Baden-Baden, Prof. Goltz, of Strassburg, reported a most remarkable experiment. He cut out, in two operations, almost the entire cerebrum of a dog, leaving the cerebellum and a small portion of the base of the cerebrum. The animal lived for fifty one days after the last operation, and then died of pneumonia. The remarkable part of the experiment was the influence it had on the dog, who, a few hours after the operation, raised himself on his hind legs, put his paws over the side of the box, and looked inquiringly around. He could walk, eat and drink, and would chew any food that was placed in his mouth. Waking and sleeping alternated naturally. He was restless before feeding, but afterward would become quiet and sleep. A slight touch would awaken him from sleep. During urination and defecation the animal assumed the normal position. Hearing, taste and smell were, of course, absent.—*Weider Med. Presse.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,

EDITOR.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, NOVEMBER 9, 1889.

SECTARIANISM IN MEDICINE,

At a recent meeting of the Philadelphia County Medical Society Dr. Edward Jackson read a paper against sectarianism in medicine. In order that medical science may progress as rapidly as possible and be of the greatest service to mankind, all members of the medical profession should be associated in hearty good feeling and earnest co-operation.

Our code of ethics reads: "No one can be considered a regular practitioner or fit associate in consultation whose practice is based on an exclusive dogma to the rejection of the accumulative experience of the profession and of the aids actually furnished by anatomy, physiology, pathology and organic chemistry."

The "Hahnemann Medical College and Hospital" named after the founder of Homœopathy, teaches all the foregoing branches, two thirds of its text-books are unquestionably orthodox, and the faculty discourages the practice of advertising by sign or card, that its graduates are homœopathists. Dr. Jackson can see no good reason why such men should not be recognized by us and met in consultation.

In reply Dr. Solomon Solis-Cohen shows from the *Organon* of Hahnemann that:

1. Homæopathy is exclusively a system of drug-therapeutics; explicitly renouncing the aid of *vis medicatrix naturæ*; denouncing the study of anatomy, physiology, pathology, etiology, semeiology, nosology and diagnosis.

2. It is an arbitrary and exclusive system, inflexible and claiming to be infallible.

3. It expressly prohibits the endeavor to interpret morbid symptoms as indications of changes in the structure or functional activity of different tissues and organs.

4. The doctrine of *homœopathia* is inextricably bound up with the practice of infinitesimal dosage.

Such men as those connected with the Hahnemann school either are or are not homœopathists. If they are, consultation with them could in no way be productive of good. If they are not the public is deceived.

Many people choose a homœopathist because they understand he gives small doses of medicine. If he does not his patients are deceived; "he wears for hire the livery of error," accepting the fees of those desiring homœopathic treatment; homœopathy is accredited with what is due the regular practice of medicine and in this way a blow is dealt what we believe to be the true science of medicine. Consultation with such a one gives countenance to fraud and at the same time detracts from the profession we practice.

The title-page of the announcement of the Hahnemann school bears this motto, which is a good one: "*In certis unitas, in dubiis libertas, in omnibus charitas.*" With charity we respect the sincerity of the heathen in worshiping his idols, but can not worship with him. Should one worship with him to carry favor, we could neither respect that one nor countenance his duplicity. If one is honestly a homœopathist we respect his honesty; if he uses his name merely as a means of gain, to say the least, he can not lay claim to honesty. Consultation with the former could be productive of no good—with the latter would be wrong.

We unhesitatingly express the conviction that Professor Solis-Cohen presents the best argument for the best side of the case. H. G. H.

"STATE ITEMS."

Among the various journals on our exchange list there are but few which receive more careful perusal than our esteemed contemporary, the *Chicago Medical Standard.* One of its chief attractions, which it modestly tucks in at the end of its reading matter, last, though not least, consists of several pages of bright, newsy notes headed "State Items." For the benefit of our readers we venture to note a few valuable excerpts from the November issue.

"Alabama.—Dr. Lichstein, of Birmingham, recently experimented on himself with the 'elixir,' and was cowhided in consequence by a patient's wife for manifesting too much affection for her." Those who have not yet summed up the value of the "Brown-Sequard" treatment would do well to add this tragedy to their case record.

"California.—A Santa Cruz doctor has been fined $30 for cruelty to animals. Dr. Lewes Lee is said to have deserted his wife.—Henry Bron, an English sailor, has been sent to the insane asylum at Saint Agnew's. He declares himself two million years old and says he has been enabled to live to that age by the use of Brown Sequard's elixir." In this latter item the delusion is noteworthy, but it does not compare with that

harmless delusion harbored by so many inhabitants of the city at the end of the Hennepin, to the effect that Chicago and the World's Fair will, in some as yet unexplained fashion, manage to connect. We are further highly edified by the news that one California physician has just been convicted of manslaughter for killing a newspaper editor while in an irritable frame of mind, and that another has just been released after three years imprisonment for wife poisoning, having been at one time sentenced to be hung.

"Colorado.—Dr. George W. Cory, of Denver, has been arrested for criminal malpractice."

Illinois.—Chicago, itself, receives among others the following complimentary notices:

"The wife of Dr. J. B. Phelan thought that a female patient looked too healthy, and treated this abnormal health by hammering her, for too much attention to Dr. Phelan. Dr. J. E. Blaine, of Englewood, has been arrested for criminal abortion. Dr. R. Westerborg has been sent to the penitentiary for four years for criminal abortion. Dr. Vincent Haight recently left the city leaving a large number of debts and several enraged patients behind." We heartily sympathize with those who must confront the exigencies of a Chicago practice; the fact that one or two practitioners are noted as committing suicide needs no explanation whatever.

"Indiana.—Dr. L. Day, of Elkhart, has been sentenced to three years in the penitentiary for malpractice. Dr. W. A. Brandon, of Andrews, was recently seriously hurt by the enraged husband of one of his lady patients."

"Kansas.—Dr. H. H. Davis, of Kansas City, was recently fined for assault."

"Mississippi.—Dr. L. M. Loper, of Brandon, has been sentenced to three years in the penitentiary on the charge of obtaining money on false pretences."

"Missouri.—Dr. T. S. Dougherty, of Marshall, has been acquitted of the charge of assault with intent to kill."

"Nebraska.—Dr. McManay, of Omaha, has been sued for $25,000 for criminal libel."

New York has a wealth of choice notices:—"Dr. Jas. Downey, who has been under arrest charged with poisoning his wife, has been discharged by the grand jury. Dr. Henry Hart has disappeared from Rochester leaving numerous debts unpaid. Dr. C. A. Barnes, of New York City, has just been divorced from his wife. Dr. W. A. Watson has been arrested for obtaining money under false pretences." Dr. J. A. Morgan, of Brooklyn, evidently saw that heroic treatment was indicated when he "recently blackened the eyes of a man who called him a chump in a hotel bar-room."

"Pennsylvania.—Dr. C. A. Heintze, of Philadelphia, was recently arrested for criminal malpractice."

Such items, beside being news of an entertaining character, tend decidedly to elevate the dignity of the profession. In addition to the above there were other notes, some descriptive, some historical, some facetious, all blended together into one harmonious mosaic which resembled nothing so much as the columns of the *Police Gazette*. In fact, the only thing lacking was the illustrations and we trust these will be forth-coming in the following number.

Smart and the Health Department.

We are glad to learn from Chief Sanitary Officer Francis that an investigation conducted by him proved the utter falsity of the charges made by a daily paper, that Smart, the diphtheria quack, obtained his information as to the location of new cases through some of the employes of the Health Department. And in this connection we take occasion to thank and, at the same time, congratulate Collector Ziegenhein on the active and business-like manner in which he has disposed of this deep-dyed villain.

Within two or three days after he had taken the matter in hand, Smart was humbly begging for the opportunity of being allowed to quit his nefarious practice, promising that if the prosecution for the collection of the tax imposed were stayed he would sin no more. The collector wisely held to his determination to punish him to the full extent of the law.

This is in sharp contrast to the apathy hitherto shown by the city's departments on this question.

The Induction of Premature Labor.

B. C. Hirst, M.D., in the *Univ. Med. Mag.*, lays great stress upon the importance of the induction of premature labor and believes that it should be practised oftener than it is at the present.

The death-rate of parturition will be much reduced when the antiseptic idea becomes as prevalent in obstetric practice as it should be. An educated physician should be prepared to meet with the perils of pregnancy and parturition in a civilized community; in our own times and conditions the large-headed infants of brain-workers; the small and perhaps deformed pelves of the domesticated and often ill-reared human animal; the poorly developed muscles of abdomen and uterus that come of corsets, confinement and lack of exercise; the inelastic muscles and connective tissues that surround the birth canal and its outlet; the too frequent inadequacy of the excretory organs to discharge the effete products of two organisms, the incapacity of an irritable and weak nervous system to stand any additional strain, are all conditions which singly or combined, present so many possible dangers and disasters that it is a question whether the one-time natural function of child-bearing should not now be invested with all the importance, to the medical mind, of a diseased state. * * * Many of the dangers that surround pregnancy and labor can be avoided by the premature induction of labor; it secures the birth of an undersized child if the pelvic canal is diminished; it relieves disease that has

its origin in or is very much aggravated by the condition of pregnancy, and meets other rarer but equally important indications; the operation, moreover, if so simple a manœuvre deserves that name, is as safe, easy and effective as any procedure in medicine.

The most preferable method is that of Krause's, except, of course, in case of placenta prævia.

The vagina is cleansed by a douche of corrosive sublimate, 1-4000, and the cervical canal wiped out. A rubber bougie of medium thickness, which has been lying in a basin of sublimate solution, is guided into the os, the patient being in Sims' position, and pushed gently forward for seven or eight inches, being allowed to find its own way between the membranes. The projecting end is turned into the vagina, and the whole held in place by a loose tampon. Twenty-four hours later the cervix will commonly be found soft, but the os not dilated. Another bougie is then placed alongside the first, and the tampon replaced by a fresh one. In about twelve hours the os will likely be sufficiently dilated to allow the completion of the delivery by forceps, version or by the natural forces, as seem best in the individual case.

That the indications for this operation are often overlooked and the opportunity allowed to pass is unfortunately too true. With improved training in obstetrical diagnosis, including pelvimetry, among medical practitioners and students, with a more general adoption of antisepsis in obstetrical practice, it is certain that the mortality of childbirth in the future will be steadily diminished.

The Treatment of Prostatic Enlargement.

At the last meeting of the British Medical Association, Dr. A. F. McGill read a paper on the treatment of retention of urine from prostatic enlargement, which is published in the *British Medical Journal.* The paper treats more particularly of chronic retention. A catheter usually answers in acute cases, but where the relief is only temporary the case is denominated chronic. Prostatic enlargements which give rise to urinary symptoms are intravesical, and not rectal, and the symptoms in prostatic hypertrophy bear little or no relation to the size of the prostate as felt through the rectum; in some cases the size of the prostate is apparently normal, while in others an immense prostate causing intestinal obstruction may bring about no urinary symptoms. The intravesical growth has many varieties.

Retention is usually caused by a valvelike action of the intravesical growth, the urethral orifice being closed more or less completely by the contraction of the bladder, and the more violent the contraction the more complete is the valvular action. When the patient ceases to strain the urine begins to flow in a feeble stream.

After a time, however, some urine remains back, and this residual urine varies much as to quantity, sometimes amounting to a pint or more. McGill's explanation of the mechanism of residual urine differs from that generally received; when the bladder is only partially full it contracts to more advantage, and the valve action is thus more complete. In many cases self-catheterization is all that is necessary, but where it fails or is unavailable radical measures are indicated. In many cases treated by the catheter, cystitis supervenes, and where a radical operation is performed, to be effectual it should (1) for a time thoroughly drain the bladder, and (2) permanently remove the cause of the obstruction; these two indications are better fulfilled by the suprapubic than by the urethral or perineal operation. The urethral operation is founded on faulty anatomy, it being supposed that the cause of obstruction is a bar at the vesical neck; this is but rarely the case. In his 24 cases only 5 presented anything like a bar, and in these the success of either Mercier's or Bottini's operation would have been doubtful. The urethral operation appears to him to be in every way unsatisfactory, and fulfills neither of the two above indications.

He prefers the suprapubic to the perineal operation for the reasons: 1. It is more generally applicable. 2. It can be performed with greater precision, and completed with greater certainty. The bladder may be explored more completely, and removal of the growth is effected with greater ease. 3. It insures complete and most efficient drainage. Experience has shown that drainage takes place more easily through the soft abdominal than through the hard perineal tissues. 4. It is equally safe. This assertion rests upon his opinion and not upon statistics. Among his cases of pure prostatectomy there were 3 deaths inseventeen. According to his table of suprapubic cystotomies the mortality was lower than could reasonably be expected from the age of patients, their condition, etc.

With regard to the operation, he believes that 8 or 10 ounces of water are usually sufficient for the rectal bag, and that it is better to leave a catheter in the bladder until the cavity is opened, as it expedites the operation. Care should be taken not to hook the peritoneal fold into the wound. The prostate should be removed as far as possible with the finger, and not by cuttting. After snipping through the mucous membrane at the base of the growth, the rest of the operation is completed with finger and forceps. In this way excessive hæmorrhage is prevented. Hæmorrhage, where it occurs, is best arrested by hot water irrigation. When the operation is completed, a suture passed through the lower angle of the wound is a safeguard against extravasation into the suprapubic space. A large tube should be inserted into the bladder, and the wound above united by a deep and superficial row of sutures. The tube is to be removed in forty-eight hours. The after-treatment consists simply in keeping the parts clean, and washing the bladder and the wound, in exceptional cases, with a boracic solution.

MEDICAL ITEMS.

Dr. Carl Koller, the discoverer of cocaine anæsthesia, has been made Instructor in Ophthalmology at the New York Polyclinic.

Hyoscine as a Sedative.—Where morphia and other drugs are inadmissable or without effect, the hydrobromate of hyoscine given subcutaneously in doses of from $^1/_{100}$ to $_1/_{50}$ grain is said to sometimes produce the happiest results.

A Nurses' Training School.—A school for nurses has been established at the Cooper Hospital, Camden, N. J. This is the first school of the kind organized in Southern New Jersey. The first session of the shcool commenced October 4.

The International Medical Congress.—Professor Virchow telegraphs from Berlin that the Organizing Committee of the Tenth International Medical Congress has been constituted by the election of himself as President, and Dr. Lasar Secretary-General.

A Mammoth Cave Sanitarium.—A company is putting down a shaft into Grand Avenue Cave, four miles from Mammoth Cave, for the purpose of bringing up the air and putting it into the rooms of a large hotel which they propose to build, both as a pleasure-resort and sanitarium.

A New Illinois Medical Register.—Dr. Rauch, Secretary of the Illinois State Board of Health, announces that a new medical directory for his State will soon be published. There has been no revised edition of this useful publication since 1886, the Secretary's hands having been tied by unfriendly legislators and a want of the necessary funds.

Sterilization of Gum Catheters.—After many failures with solutions of various antiseptic materials, M. Delageniere claims to have succeeded in rendering soft gum catheters aseptic by means of dry heat, afforded by a sterilizer,such as is used in laboratories.The sounds were able to withstand a much higher degree of heat than was expected, for a few moments, 110°C. being reached.

Yellow Fever at Key West.—Four sporadic cases of yellow fever have lately been discovered at Key West, in consequence of which quarantine has been established there. A fifth case occurred in a man who had left Havana September 21, went direct by sea to New York and then returned to Key West, overland, October 1. Consequently no connection can be traced between this and the other cases.

Tuberculosis of the Skin, Inoculated by Tattooing.—M. Tournier reported a case to the Societe des Sciences Medicales which is almost unique in its rarity. In 1887 the patient had an artist tattoo a figure on his forearm; the operator mixed the ink with saliva of the patient himself (who was at the time consumptive). Afterward an ulcer appeared at the site, and proved, on investigation, to be tuberculous in its nature.

A Remedy for Overcrowding in the Profession.—Big Bob Sattoo, the "tenanimous" or medicine man of the Swinomish Indians in Washington Territory, was lately killed by four Indians, a committee of the tribe appointed for the purpose. His offense was that, while responsible for the health of the tribe,he had permitted, or had not prevented, an epidemic which had prevailed among them for some time. It is to be hoped that the practice of burying the doctor with his mistakes will not spread; such a process of selection is rather too far ahead of the times.

Worldly Wisdom.—Professor Charpentier, of Paris, gives the following advice to physicians, as to the most prudent answer to be given when asked what they think the sex of the child is going to be. "Reply by asking the mother what she would prefer in the child, and then give it as your opinion the opposite is the one to be looked for. In this way, if the sex turns out to be the one you have prognosticated, you will be thought a wonderful man, while if it proves to be the one the mother has wished for, she will be so pleased that she will easily overlook your error."

Leprosy at Cuba.—At the recent meeting of the American Public Health Association, in Brooklyn, N. Y., October 22, Dr. Benjamin Lea, of Philadelphia, presented a paper showing the alarming prevalence of leprosy in Cuba. A resolution was passed by the association requesting the Surgeon General of the Marine-Hospital Service, the State Board of Health of Florida, and all quarantine commissioners of ports having intercourse with Cuban ports, to exercise the same vigilance with regard to leprosy that is already observed with regard to yellow fever.

Diminution of Urea in Cancer of the Stomach; Its Diagnostic Importance.—M. Rauzier has written a book lately, on the differential diagnosis between cancer of the stomach and abdominal tumors, in which, while acknowledging the fact that there do not exist any pathognomonic signs of cancer, he claims that there is one which is of considerable importance, viz., the diminution in the amount of urea excreted. The decrease depends, he claims, on a vice of nutrition special to the disease. Malignant tumors, whatever their situation, result in interfering with nutrition; the consequence is a diminution in the amount of urinary nitrogen. The sign then is only of importance when the nutrition is vitiated. For this reason, it is of less value in cases of superficial cancers. It is of especial service

when a differentiation between cancer and ulcer of the stomach is in suspense. Rauzier thinks it is of material prognostic importance when the question of operating on abdominal tumors comes up. In certain cases death succeeds surgical intervention resulting from latent nephritis, which had previously manifested its presence only by the diminished quantity of urea.

Medical Experts.—The Supreme Court of Wisconsin has recently rendered an opinion which is of interest to medical men. The substance of this opinion is that the testimony of a medical witness who has had no practical experience in the treatment of cases of poisoning, and who testifies only from memory and his knowledge of what medical works and medical instructors teach on this subject, "is, at best, hearsay, and inadmissable in a criminal trial for murder by poisoning." The general opinion seems to be that this is unjust but that is is perfectly proper that the lack of practical experience should be considered by the jury, in connection with the expert's other qualifications, in determining the weight to be given to his testimony.

The Johns Hopkins Hospital Bulletin.—The Trustees of the Johns Hopkins Hospital have authorized the issue of a monthly publication to be known as the Hospital Bulletin. It will contain announcements of courses of lectures, programme of clinical and pathological study, details of hospital and dispensary practice, abstracts of papers read and other proceedings of the Medical Society of the Hospital, reports of lectures and all other matters of general interest in connection with the work of the Hospital. Nine numbers will be issued annually. The first number will appear in November, 1889. The subscription price will be one dollar per year. Subscriptions may be sent to The Publication Agency of the Johns Hopkins University, Baltimore, Md.

The History of Leprosy in the Sandwich Islands.—The Hawaiian consul, in an article addressed to the *Times*, gives an interesting history of the specific disease of the Hawaiian Islands, leprosy The first case appeared about forty years ago. Within twenty years a great part of the population fell victims to the terrible disease. In 1865 the patients were moved and restricted to the island of Molokai. At first great disorder prevailed in the colony, but in the year 1873 a Mr. Ragsdale offered his services as superintendent of the asylum, and conducted its affairs well during his lifetime. To-day the colony of patients is by no means a mass of discontented people, for the love of work, a religious sentiment, and resignation is strongly developed in them. Their number changes from time to time; it was largest in 1884, when it reached 100; it is worthy of notice that most patients are men. The colony has received an appropriation of $100,000 from the Government, and the royal couple attest great sympathy for the unfortunate ones. Three years ago they (the royal couple) paid the colony a visit, upon which occasion a psalm composed by the King was sung. The average duration of the disease is eleven years, the death percentage 58 a thousand. Until now there is no remedy for the disease, but an oil, the so called Giurjun-oil, received from the India government, is said to possess a healing effect. The doctor of the colony, Dr. Hoffmann, is himself suffering with leprosy.—*Deutsche Correspondent.*

BOOK REVIEWS.

Elements of Therapeutics and Practice According to the Dosimetric System. By Dr. D'Oliveira Castro. Translation from the French. D. Appleton & Co., New York. 1888.

As a practical and comprehensive exposition of the Dosimetric Method of prescribing, this work, which received the approval of the Dosimetric Institute of Medicine of Paris, in 1886, and at the same time received for its author the first (Burggræve) prize of 2,000 francs, is a most admirable success.

The readers of the Review are doubtless familiar, to some extent, with the objects aimed at by the advocates of this method of prescribing—of administering drugs in their alkaloidal form, which dispenses with the many uncertain and ofttimes antagonistic properties possessed by drugs in their crude state, and at the same time affords scientific accuracy and exactitude.

The progress made by this method in the short time in which it has existed is a warranty of its ultimate supremacy. And with the conviction of the uncertainties of medicine and therapy in general, we can afford to welcome, in no ambiguous terms, a practice which promises improvement in this respect.

The first part of the book embraces a dissertation on Life, Disease and Medicaments. The second part describes and discusses the medicinal properties and action of drugs used in dosimetric medicine. The third part (three-fourths of the entire work) presents, in alphabetical order, a list of diseases and their conspicuous morbid elements, with indications for the dosimetric drugs most applicable to the given cases, directions as to the time, frequency and manner of administration, etc. For the physician studying or practicing the Dosimetric Method, this book should prove an invaluable aid.

The "Medical News" Visiting List for 1890. Lea Brothers and Co., Philadelphia. Price, $1.25; with Ready-Reference Thumb-letter Index, $1.50.

This popular visiting list will doubtless continue to maintain the firm hold which it has upon the profession. The issue for 1890 is a thorough revision of its predecessor, and has been brought up to date in every respect.

To the essential features of a visiting list have been added a number of desirable features, many of which are peculiar to itself.

The points upon which the memory is most apt to prove treacherous are all included, the notes being brief and concise, yet containing all that is necessary to prompt the physician's memory.

The text portion (48 pages) contains among many useful data the following: Confinement table, signs of pregnancy, weights and measures, both ordinary and metric, urinary examination, table of eruptive fevers, disinfectants, incompatibles, dose table, therapeutic table, (modified from Lauder Brunton), poisons and antidotes, and even the latest therapeutic novelties, with their doses and effects. The classified blanks (176 pages) afford ample room for records of all kinds of professional work, with memoranda and accounts.

Any system of keeping accounts may be chosen, three styles being published, as heretofore: Weekly (dated, for thirty patients); Monthly (for 120 patients per month, and good for any year); Perpetual (undated, and also good for any year.) Each style is in one volume, gotten up very attractively in handsome red leather, with pocket and pencil.

The Thumb-Letter Index, peculiar to this list, is furnished when desired, and should save many times its trifling cost (25 cents) in the economy of time effected. In short, every need of the physician seems to have been anticipated.

LITERARY NOTES.

THE JOURNALIST: This journal by a journalist, for journalists, authors, artists and publishers, is a truly interesting and attractive periodical, edited and published by Allan Forman, 117 Nassau Street, New York. Subscription price, $4 a year.

In the October number of the *Home-Maker*, a most admirable monthly magazine, edited by Marion Harland, and published by the Home-Maker Co., 19 West 22nd street, N. Y., the first chapters of a charming story entitled "With the Best Intentions," are presented. Contributors for this number are James Power Smith, Francis J. Dyer, Douglas Sladen, Olive Thorne Miller, Catherine Owen, Charles M. Skinner, Duffield Osborne, Grace Peckham, M.D., Kate Upson Clark and others.

CORRESPONDENCE.

A CASE OF ANTIFEBRINE POISONING.

BROOKFIELD, MO.

A case illustrating the baneful consequences of "counter-prescribing" by a druggist, and the danger of repeated doses of antifebrine kept up for several days, occurred here recently. On October 28, I was hastily summoned to see a lady living about half a mile away, the messenger stating that "she was blue in the face and seemed to be choking to death." The patient, a Mrs. S., æt. 28 years, mother of two children, the youngest, æt. 13 months and still nursing, had been complaining of facial neuralgia for several days; she consulted a druggist and was given a large number of powders, each being about 4 grains, of antifebrine, with directions to "take one powder every two hours till easy."

She began taking the powders on the 25th and kept on till the forenoon of the 28th. Feeling that the pain was rather worse than usual, she concluded to take the powders every hour. She took one at 11 A.M., and another at 12 o'clock. At 12:20 she fell out of her chair, while sitting by the stove, became unconscious, grew cold, purple in the face and seemed to be choking, "like one with the croup," said a neighbor. The bystanders had given large quantities of strong coffee before I arrived. At 1 o'clock her temperature was 96.2°; pulse feeble and irregular, about 120; respirations 9 or 10; pupils slightly dilated; tongue dry and of dark bluish color, protruded with difficulty. The hot coffee had apparently revived her slightly, as she seemed to be conscious of what was going on around her, but could scarcely articulate the shortest words, saying "yes" or "no" only with an effort. The voice had a peculiar "croupy" sound. I administered stimulants freely, giving tr. capsicum and tr. zingeber, along with brandy and alcohol. In three hours the most of the symptoms had disappeared. The patient could talk, but said that her tongue was "stiff," and the skin all over her body felt numb; she said her hands and feet "felt like pieces of wood," but she could walk around the room with a little assistance. She said that in a very short time after taking the last powder, violent pain came on in her chest, especially in the left side, extending in a few minutes to the stomach. Then she became chilly and could not move her eyes or her tongue, and her head felt as if grasped in a vise. She then became unconscious. She did not remember swallowing the first coffee that was given her, but her mother said that she swallowed what was poured into her mouth, easily. In four hours the temperature was 97⅝° F., and in ten hours it had run up to 102°. Next morning it was normal. She has had no appetite whatever since. The amount of antifebrine taken was about 48 grains a day for about three days—occasionally it seemed to relieve the pain, but not sufficiently to satisfy the patient. As I have known the woman for ten years, and never knew her to have any such paroxysms before, and as she is not hysterical, I think the antifebrine caused the train of symptoms above described. The application of musturd to the chest and stomach and rubbing the extremities seemed to give the patient nearly as much relief the first hour and a half as the internal treatment before mentioned.

ROBERT HALEY, M.D.

SOCIETY PROCEEDINGS.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

[CONCLUDED FROM PAGE 339]

DR. JOSEPH HOFFMAN read a paper entitled,

A REPORT OF A SERIES OF ABDOMINAL SECTIONS WITH SPECIAL REFERENCE TO COMPLICATIONS. (p. 363.)

DISCUSSION.

DR. J. PRICE.—The mortality of this group of cases is exceptionally low. I had the opportunity of seeing most of them and counselling the procedure. Dr. Hoffman states that in some of his cases the lesions were not very marked. To me they were decidedly marked. The patients called one's attention to the seat of the pain. Some of them can ride in street-cars, but experience pain at the crossings. Others cannot ride in the street-cars on account of pain. Not over an hour ago a patient left my office and walked home because she suffered too much pain to ride. It is important that we should do this work publicly, and make public demonstrations of the angry nature of these troubles. Many of these patients have been married from one to fifteen years without conception. Some have conceived; some have had one child, but none have had more than one.

The pus cases and the extra-uterine cases interest me most. Three weeks ago I paid for carriages to send two cases to the hospital. I sent them there at five or six o'clock in the afternoon, and operated at nine o'clock the next morning. On the same day I saw, in consultation, three cases, in which I urged immediate operation. This was not done, and they all died; my cases recovered. It is curious how slow men are. They do not understand the importance of promptitude. Some weeks ago I urged operation in a case of disease of the appendix. The operation was done promptly, and the patient lives; she had suffered ten previous attacks. Surely that life was saved. Treves recently gives a similar case, and Dr. Baldy has had another. In the *Pittsburg Medical Journal* there were recently reported three or four cases of death by a man who says that the appendix is not in the abdomen.

A word in regard to flushing the peritoneal cavity The gravity irrigator is a beautiful machine. It floats up everything, and you have less manipulation and traumatism. The drainage is surer, and you remove the tube sooner. There is less shock, and the reaction is rapid. There is less rapidity of pulse and elevation of temperature.

DR. J. M. BALDY.—I wish to emphasize the point so prominently brought forward by Dr. Price—the importance of promptness in these cases, especially the inflammatory diseases. The case of extra-uterine pregnancy which I had a few weeks ago brought this to my mind more forcibly than it had been for some time. This was a case in which I had little suspected extra-uterine pregnancy. My diagnosis was pus-tube. I operated and found extra-uterine pregnancy. It was evident that the woman could have lived only a few days if the operation had not been performed. There are many such cases occurring in this city. In many the operation has been advised but not performed. The probability is that many of these cases die promptly. I know of a number of cases similar to those reported by Dr. Price. These cases are not rare, and besides ectopic gestation there are other things that will kill quickly. A blow or a kick may rupture an abscess, and in a few hours the woman will be in the coroner's hands.

With regard to the slight lesions referred to by D Hoffman, I had such a case to-day—that of a young woman married three years. She had one child in the first year of marriage. She now comes stating that she has been a continuous sufferer ever since. She arose from bed a few days after her confinement. She then "took cold" and had to go to bed for two months. The case turned out to be one of ovarian cyst. She begged that, if possible, one ovary be left and that she be not made sterile. After removing the cyst, which was somewhat of a surprise, I passed my fingers to the other side and found the appendages apparently normal, but slightly adherent. I left them, but I now think that I made a mistake. Examining the tube of the side removed, I found the fimbriated extremity entirely occluded and the tube utterly useless. The other tube is probably in the same condition, but I did not bring it to the incision to examine it, trusting entirely to my fingers to tell the tale, and they only detected "slight disease." Many of the cases spoken of as cases of slight lesions are just such cases, and are as bad as the worst pus cases, so far as child-bearing or the comfort of the woman is concerned. They should every one be removed without hesitation.

DR. JOSEPH HOFFMAN.—The gentlemen, I think, misunderstood my remarks so far as the slight lesions were concerned. I simply mean that some of them were not easily discovered.

I had intended to discuss somewhat the complications of the work, and hoped that they would be referred to in the discussion. Without going into these complications, there is one sequel that I have noticed, and I have noticed it after careful work with which I can find no fault; that is, subsequent hæmorrhage. This frequently takes place three or four months after the section. I have had a case go six months and then menstruation recur, continue a few months, and be followed by an attack of flooding. If there is any explanation of these cases I should like to hear it. In one case where the congestion was very great, and where I curetted the womb, there was a post-operative hæmatocele. In some cases, where there is no discoverable lesion these hæmorrhages will recur monthly or bi-monthly, and are a source of discomfort.

I wish to call attention to a complication that occurred in my case of extra uterine pregnancy. The woman did excellently until the tenth day. In this case the bowel had been torn through, but was sutured. The abdomen

was packed with a yard of lint and the hæmorrhage controlled. Secondary hæmorrhage occurred at the end of ten days; it was so abundant that it soaked the bed-clothing. I raised the foot of the bed and kept her quiet for two or three days and the hæmorrhage ceased. The drainage tract healed up entirely and there is no sign of fistula.

Dr. J. Price.—This subject of hæmorrhage following removal of the appendages is one about which I know very little. I have been puzzled to explain it. I am satisfied that I have included the nerves about which so much has been said by Johnstone and others, but which have been known to exist for two hundred and fifty years. I have tied the tube close to the uterus, and in some cases curetted the remaining portion, and have even used the cautery. Still, in some of these cases, at the end of one, three or six months, hæmorrhage has occurred. I have looked upon this as rather of a safety-valve action. I am rather pleased to see them bleed. I think that then the establishment of the menopause is more satisfactory. Those cases which have not bled have complained more of creeps, flushes, and those uncomfortable phenomena incident to the menopause. I have never seen the bleeding as irregular or profuse as before the operation. It is rather curious that this is more common in the pus cases done to save life, than in the fibromas where the operation is done to establish the menopause. Bleeding occurs in probably ten per cent. of the fibroid cases, and in 25% of the pus cases. These figures are, however, only approximate. My experience is that the bleeding never continues more than a year.

So far as I am aware, operators have not put on record a single case of supernumerary ovary. I have never found a supernumerary ovary. When I have finished I am satisfied they do not exist.

Dr. J. M. Baldy.—So far as my experience goes, I cannot say that any one class of cases is more liable than another to suffer from this hæmorrhage. I used to promise that the menses would cease, but I have had bitter experience, and now make no promises on that score. I do not believe in the "safety-valve" theory. I do not think that it is a good thing for them to go on bleeding. In one of the cases in which Dr. Hoffman removed the appendages cleanly there was monthly bleeding. I afterwards saw her uterus curetted, and there was undoubtedly malignant disease. I do not mean to say that in a large number of cases there is malignant disease, but in this one case there was.

I have never found another thing that satisfied me in regard to the cause, with the exception of habit. The woman has been in the habit of menstruating for years, and does not get over it immediately.

Supernumerary ovaries I have never seen, and I believe all the talk we hear about them is nonsense.

Dr. John B. Deaver.—I have seen many cases of the kind described. I do not see the philosophy of the good effect to be derived from the continuance of the bleeding. I am inclined to think to the contrary. I have seen it follow occluded tubes, with displaced and adherent ovaries. I have seen it last for a long time, and not yield to internal remedies.

In regard to the question of supernumerary ovary, I have not looked this up in the dissecting-room, but at present I cannot recall one instance of supernumerary ovary.

Dr. William E. Ashton.—The point in regard to supernumerary ovaries is referred to by Winckle, and I think that he states that 67% of women have supernumerary ovaries.

Dr. Joseph Hoffman.—I have succeeded in benefiting these hæmorrhages by the use of the curette. It seems to me that in many cases the hæmorrhage is due to hyperplasia of the intra-uterine mucous membrane. In one case the bleeding comes regularly every four weeks, and the woman feels better when it comes. In other cases I have known women to bleed so much that they were frightened. After the bleeding had continued a week or ten days, it stopped. In one such case, I used the curette, and the woman is now well. I do not believe that one explanation will cover all of the cases.

The case mentioned by Dr. Baldy is the one to which I referred as having been operated on again. The woman had Bright's disease. An extensive bleeding occurred when the kidneys were doing the least work, secreting not more than an ounce of albuminous urine in 24 hours. I do not believe that she had malignant disease. I should want a microscopic examination to satisfy me. The patient was red-faced and hearty and felt well, with the exception that she bled.

Dr. Joseph Price, read a paper on

Two Operations for Extra-Uterine Pregnancy.

The first case I have to report is that of a white woman, æt. 35 years, nursing a child of 13 months. Menses appeared on the fourth month of lactation, and remained perfectly regular at intervals of 27 days; 4 days duration; were absent two periods, followed by paroxysms of pain and collapse. At this point I saw her, and operated immediately for ruptured tubal pregnancy. I found about a quart of clotted blood in the peritoneal cavity; tubal rupture left side; hydro-salpinx right side; clean removal of both sides; irrigation; recovery.

The second case, occurring in a pure negress, is of great interest. I am not satisfied, from the microscopical appearance, that it is a true ovarian pregnancy. Ovarian cysts are very rare in true Africans. In the blood cyst, I found something for all the world like placenta and membrane. I do not wish to put this on record as an ovarian pregnancy until I receive the report of Dr. Henry Formad, the pathologist. There also existed in this case a hydro-salpinx of the other side—both demonstrating most beautifully the causal relation of tubal disease to ectopic gestation. One point of great interest in connection with these cases that survive the rupture and go into the hands of the surgeon is the marked difference in the character of the hæmorrhage

from those that go into the hands of the coroner--and they are numerous. In the latter cases, the hæmorrhage is overwhelming, and the abdomen is found full of blood. The surgeon finds probably one-fourth the blood. Dr. Formad, the coroner's physician, tells me that in one case he found the peritoneum deluged with blood, and the fœtus sitting, or washed up, on the pan creas. Its object was probably to try and escape a possibility of electrical treatment.

Dr. J. M. Baldy.—As Dr. Price states that ectopic gestation is rare in the full-blooded negro, I should like to place on record, by the side of his, such a case. The woman had been having children at regular intervals of 2 years for 8 or 10 years. The last time when her time came to become pregnant, it proved to be a pregnancy of the tube. She was operated on and saved.

Dr. Joseph Hoffman.—In extra-uterine pregnancy, the woman has usually been sterile for a long time; but in my case the patient had a child 15 months old—had missed four weeks, and thought she had caught cold. At the fifth week she had a period. The bleeding continued, and an examination showed a mass in the pelvis. I did not attempt to diagnose its exact nature. I had no idea that it was an extra uterine pregnancy until the abdomen was opened. If I had been thinking of it, the diagnosis could easily have been made.

Dr. M. Price.—There is one point to which I would call attention; and that is, in nearly every case falling into the coroner's hands the fœtus has been found. This is simply because death has occurred so rapidly that the fœtus has not had a chance to disappear. In the cases coming to the surgeon there is not so much bleeding, and the delay gives the fœtus a chance to be digested by the peritoneum. I doubt whether fœtuses, such as have been found by Dr. Formad, could have remained a few days without absorption. Many cases have been considered doubtful because the fœtus has not been found; but the fœtus has been digested, and all that remains is the placenta, membrane, and ruptured tube.

SOCIETY NEWS.

The American Academy of Music will hold its thirteenth annual meeting at Leland Hotel, Chicago, Ill., Nov. 13 and 14, 1889.

The North Texas Medical Association.—This association will hold its next meeting in Gainesville, Texas, beginning on Tuesday, December 10.

Wright County, Mo., Medical Society.—On the 5th inst. the physicians of Wright County assembled and organized what is to be known as the Wright County Medical Society.

The officers elected were: President, Dr. F. B. Fuson, Mansfield, Mo.; Vice-president, Dr. J. M. Perkins, Grove Springs; Secretary, Dr. Thos. Lane, Mount Grove; Treasurer, Dr. J. H. McClealand, Unifore.

SELECTIONS.

GYNAIA.—A REVIEW.

It has been discovered of late years, that many habits of the body and mind are really diseases. First it was ascertained that a tendency on the part of an excited and disappointed woman to howl and throw things is not a manifestation of bad temper, but a disease called hysteria. Then drunkenness, thieving, and other unpleasant habits, were found to be diseases with difficult and painful Greek names. The very latest discovery of this kind has been made by the distinguished German homœopathist, Dr. Steinerkopf, whose recent monograph on "Gynaia, Its Symptoms and Treatment," is attracting so much attention in homœopathic medical circles.

The eminent physician shows very conclusively that those peculiarities of character which cause certain men to be called effeminate, are only symptoms of a disease, only recently recognized, and called by him gynaia. The patient who suffers from this disease is timid, excitable, averse to tobacco and dogs, and though apparently without much energy is, nevertheless, wonderfully persistent in clinging to his own views, and compelling other men to yield to his wishes and whims. "Gynaia," remarks Dr. Steinerkopf, "may be briefly defined as the simulated existence of feminine moral qualities in the person of a man." With the existence of the disease we are all familliar, though it has never occurred to any man that effeminancy was a real disease. The fact that it is a disease is, however, so clearly shown by Dr. Steinerkopf, that it must hereafter be conceded.

Being a firm believer, not only in the universality of the law "*similia similibus curantur*," but also in the potency of the very highest dilutions, Dr. Steinerkopf could no longer be in any doubt as to the proper remedy for Gynaia. The various symptoms were by him finally classified as different manifestations of effeminancy or womanliness, and hence the remedy indicated was necessarily that which produced similar symptoms, or womanliness itself in extremely attenuated doses. Thus far all was plain and simple, but how to obtain a sufficiently high dilution of womanliness was the next problem. The recent method of procuring the mother tincture of manliness had not been announced to the world by Dr. Brown-Sequard, and even if it had, the labor of producing a sufficiently high attenuation of so powerful an essence as that of womanliness, would occupy the doctor's best years, before he arrived at a point where the remedy would not produce an aggravation of the disease. Fortunately, a would-be sarcastic sentence in one of the medical journals of the old school furnishes Dr. Steinerkopf with an invaluable hint. The journal article in question said of the 50th dilution of *Lachesis*, "this dilution is equivalent to one drop of the tincture of the alleged drug diluted with the whole Atlantic Ocean." Reading these words Dr.

Steinerkopf at once saw his way clear; the Atlantic Ocean was precisely what he needed. Could he dilute one with the whole Atlantic, he would have a dilution at least as high as the 50th of any drug, and probably quite as efficacious.

No sooner had this brilliant idea flashed across the doctor's brain than he filled his pockets with vials and started for the nearest watering-place. Day after day he was observed walking on the beach with an anxious air of expectation. It was not for several days that he was able to find what he sought—a girl bathing alone and enjoying a monopoly of the ocean. Tremulously seizing his watch in one hand and a glass vase in another, he waited for ten minutes to elapse, and then rushing into the surf regardless of his shoes and trousers, he scooped up a gallon of water and bore it triumphantly to his lodgings. He had now the requisite high dilution of girl, but it was combined with other undesirable elements. He, therefore, by a process invented by himself, and as yet undivulged, removed with great care the sodium salts, the iodine, orange peel, old boots and other emanations which are found in sea-water; and after much labor in sterilizing his fluid, he finally prepared a chemically pure remedy, which he bottled and labelled "*Puella domestica, 50th.*" He had his remedy at last, and it only remained to prove its efficacy.

Following the example of the devoted Hahnemann, he proceeded to prove the new drug upon himself. A large part of his monograph is occupied with these drug-provings, and they are wonderfully interesting, and amply repay for their perusal. Four doses, taken at short intervals, produced in the doctor's mind a vague longing to wear bonnets, and an uncomfortable tendency to sit with one foot doubled under him. Two doses, taken at intervals of eight hours, produced a distinct desire for cats, and an abnormal interest in certain ladies who passed beneath the doctor's window, a profound reverence for the clergy, and a dread least an ancient horse-pistol which had hung for at last thirty years unloaded in the doctor's office, should go off and kill somebody. There is no doubt in the mind of Dr. Steinerkopf, that could he have taken little enough of this remedy it would have transformed him morally and mentally into the exact image of the typical woman.

The drug was subsequently used by the distinguished discoverer in his practice, with the most wonderful clinical success; producing, as it did, the most miraculous cures of confirmed cases of gynaia. In fact, there are few drugs in the whole homœopathic materia medica which have so uniformly produced such astonishing cures no matter how long and how obstinately the disease may have existed in a chronic form. That it is a true specific for gynaia no one can doubt who has read the evidence.

It should be added that the doctor asserts that no harm can result to healthy persons from bathing at watering-places, since it is only at exceptional moments that there is a sufficiently small quantity of girl in the Atlantic to form a dilution high enough to possess any medical virtue.—*Pac. Med. Jour.*

SOMETHING MORE ON HIGHER MEDICAL STANDARDS.

From time to time a great deal has been said in the pages of this journal on the subject of quackery in Louisiana, and the necessity for a more thorough preparatory education among good men who wish to take upon themselves the honors and responsibilities of the physician. While we have never exaggerated this matter, we have never presented it to our confreres in its most convincing form—namely, by direct illustration; so we now take the liberty of "offering in evidence" two documents which, in literary excellence alone, will rank their compilers with such orthographic lights as "Josh Billings" and the author of "Freddy's Slate."

These documents were kindly lent to us by the officials of the Board of Health, and it is asserted that the archives of the said board contain many more of interest and merit almost equal to those here reproduced.

The first letter will speak for itself. The author, who acknowledges that he has never received any medical instruction from college or hospital, applies for a license to practice, and opens his request with the following Chesterfieldian paragraph:

"The Preementents of Medical Sciences fernish a seblim objeck on the gineral map of the human mind and could it Reach that lofty Preementents and proud Destinction of other Sciences called Perfect to cure our Deseases and heal our Pains with out fale how great would be the some of human happiness at this Nobel objeck it aims).(the mind led by the Deity and improved by the indications of his Power shall yet Retain that Perfection of knowledge that will Render life a gineral Blessing and Deth the Disolution of a Tabnickel worne out by time and exosted By sloe Decay. . . . (.) The Mind was made for victory and he that over comes shall ware the victory Crown *."

The applicant, whom we will call Dr. VanSmith, then proceeds to enumerate the number of persons in his family and after rehearsing several of his physical ailments, continues:

"I only profesh the Theory and Practis of Medicin and I perses from a long study and from long experience under the Profeshen. I. have the Theory of the 2 schools. I. will give you sample Gentlemen in the human system are manifested three actions vital actional chemical action and electrical vital action is effect of that unknown agency by which life is sustained and from which Results mind, sensation voluntary and involuntary Motion and Reproduction; this action is perfect only when the chemical and electricial actions of the system are also penfect Health consists of an equilibrium of them."

"Thesis on fever, homeopathicis to make use of those

remedies which will arouse the various excretory organs to a state of action by vomiting, perging, sweating and thus cause the morbific agents to be eliminated from the system."

The improved spelling of the latter erudite disserta tions on the schools of medicine is something to be remarked. It has a second-hand look about it, yet, if so, who could have been the original author?

Contrast it with the next sentence, which undoubtedly bears the stamp of the writer's strong individuality: "in explanation gentlemen, I was borned in the southern states, raised by my father eminetent physician of south, so far as my morril character I can give as good refference as eny man, so fair as charracter gineral. I come of as high tone family as eny man in southern states of Amarkey." The usual endorsements end the agony. Eight citizens declare that Dr. Van Smith is "a onest good citeson, and a good female doctor," as worthy of all the "oners and priviledgs of the profeshen as eny man."

The second letter which we wish to present comes from a gentleman who is licensed to kill or cure, under the five-years-in-practice law. Dr. De Jones is evidently careful with his cases and probably takes notes.

His letter was written some three years ago on a printed slip, forwarded by the Board of Health, asking if there was any leprosy in his parish.

He says, on the blank space left for remarks:—"Request to the on I bul board of louisiana we haf had what I call tiphoid flux which has seem to bafful the skil wher it has struck I will giv De tail of same it is in tent fevor with in famation of the intestines the fevor seems biddefiere to skill especila wher it wold strike larg famlea as it has bin her in this parish for som time and has seem to bafful the skill of all hoo has metit I umble ask your counsul.

reSpec fulle youse,
H. De Jones M. D.

We submit these two communications as *samples*, not as exceptions, for there are other medical quacks within and without the law, who can do very little, if any, better in a literary effort—men who are "gulling" the public with their knavery or their ignorance, and who will continue to do so while the state laws and public opinion continue to license them to practice. The two cases cited seem to be of ignorance rather than knavery, and as Dr. Van Smith lives near the border line he may be practicing on the unsuspecting citizens of a sister state, after being refused a license by our own authorities; for his petition was rejected.

But Dr. De Jones (he calls himself M. D.) still continues his researches, and is at this moment, very probably, studying that "tiphoid flux which has seem to bafful the skill wher it has struck," and he may continue to "biddefiere" to all boards of health as long as the lax laws of Louisiana uphold his ignorance and demand no higher standards.—Ed. *N. O. Medical and Surgical Journal.*

ANCIENT SURGERY IN GERMANY

Ambroise Pare, who became a master barber surgeon in 1536, and died in 1590, has been called the reformer of surgery, and the French claim in particular that their illustrious countryman was the first to apply the ligature to arteries. Professor Edmund Rose, in an address delivered before the "Freien Vereinigung Berliner Chirurgen" May 13, of this year, [1]laid before the meeting a copy of a work dated 1497, by Jeronymus Brunschwyg, a Strasburg surgeon. On page 19 of this work is a colored woodcut of an operation room, with a description of various instruments then in use—the amputating knife and saw, various probes, needles in handles small hooks for taking up arteries ("damit aufzuheben die Adern"), small and large spatulæ, bent to assist in drawing out the ligature ("die do Haar uss ziehen"), etc. Further on the whole *armamentarium* for the extraction of shots or pellets is given. It must be remembered that the arquebuss, the first form of gun fired by a trigger, first came into use about the middle of the fifteenth century. On page 51 are represented six simple trephining instruments.

Professor Rose is troubled because even in the latest edition of a well-read German surgical work Pare is still called the "reformer of surgery," whereas his surgery was still "barbaric" when other surgeons had made advances. His oxen with human heads was exactly the same as in Licetus. He was not the first to abandon the old way of treating gunshot wounds (namely, by pouring boiling oil into them), nor did he discover the ligatnre of arteries, or bring it into general use. Petit, himself a Frenchman, protested against this prevalent idea in the eighteenth century, and at the close of that century Mursinna, in Berlin, commended his way of controlling hæmorrhage after removal of the mammary glands. A plug with a complicated dressing was fastened over each separate artery. Jeronymus Brunschwyg's own words run thus:

"Das ist, so du siehest ein Ader fast bluten, als an dem Hals die Giessader (carotid) oder ein verwundete Pulsader, dass du die Ader herauziehest mit der Nadel und dadurch stichest, und inter Nadeln die Ader verknupfest mit dəm, Faden, der da in der Nadeln ist, und dann der Nadeln durchziehest. Und ein Stucklein Fadens an der Ader bleibt hengen, uber etlich Tag verfuelet d ober Theil des Adern, und geht der Faden heraus." (That is, that when you see an artery bleeding fast, such as the carotid in the neck, or a wounded pulse artery you draw out the artery with the needle, and thereby penetrate, and tie the artery behind the needle with the thread which is in the needle, and then draw out the needle. And a small piece of thread is left hanging from the artery. After some days the upper end of the artery mortifies (decomposes), and the thread is detached.) These words are plain enough; the man who uses them had evidently ligatured arteries himself.

As regards gunshot wounds, old Jeronymus Brun-

[1]Berliner klin. Wochenschrift, July 1, 1889.

schwyg acted on the sound principle of extreme cleanliness. He spoke of poisoned arrows, etc., just as we, a few years ago, talked of "infected" wounds without any clear idea of wound diseases. He cleansed the wound with violet or linseed oil (occasionally camphorated), and expressly says "ein wenig gewarmt" (a little warmed). Thus, he did not advocate the use of boiling oil in such cases. Long afterwards Ambroise Pare omitted the use of this latter means of treating gunshot wounds on one occasion, and tells us that he could not sleep that night from anxiety for his patient's welfare. As to washing with goat's milk, this had already been recommended by Menrich von Pfolsprundt in his *Buch der Bundth-Ertznei* published in 1460. The above fluids were evidently found to be aseptic, or rather free from nocuous germs of their own, hence their proved utility on many a battle ground.

The unguentum elemi has been called the balsam of Arcæus. We find the same balsam in Brunschwyg's work. Here it is spoken of as "the best of all balsam for recent wounds that can be had, and its like can hardly be found." And again, it almost makes the flesh grow." But, in another place, he inveighs against the indiscriminate use of "that Strassburg balsam, discovered about the year 1460, and now spread about throughout all Germany."

Refracture after faulty union of fractured ends of bones has been attributed to a Swabian surgeon of the name of Bosch, who lived in the middle of the last century. This also is bosh. Brunschwyg did the same thing; he either broke the bone across his knee or laid the limb, enveloped in a cloth, across two supports, and trod on it with the naked foot. Extension was effected gradually by screws, that is in recent cases—old ones were let alone, on the principle, as we are told, that it is "better to be alive and limp, than to die even with a straight limb."

"Window" bandages were recommended for compound fractures and wounds. A "doltdrank" was given sometimes to overpower a patient with sleep, so that incisions might be made and a fragment of an arrow, etc., removed without pain. The chief ingredient was opium. Ancient surgery in Germany, to judge of this work, had evidently arrived at a high pitch before Ambroise Pare was born.—*Br. Med. Jour.*

THE LUXURY OF PROFESSIONAL LYING.

Perhaps there is no man or set of men who have the temptation to lie put before them as doctors have. They are absolutely urged to lie on certain occasions, and compelled to on others, and should be equal to the emergency. Again, a doctor is morally bound to lie under certain circumstances. It is his duty, and wherein he fails in that respect he fails to do justice to his patient. In my own experience I verily believe that I have saved many a life and prolonged many others, by what I believed at the time was a good wholesome lie.

In the practice of medicine lying gets to be a luxury. You dote on it. You practice outside so as to perfect yourself, so to speak. You linger lispingly on the words which must and will convey a meaning other than the truth to your patient. Talk about dealing in unvarnished truth with your patients. Why it is preposterous. They won't stay by you. They will go to a man who tells them a better story. Take consumptives, for instance, and you tell them that they have incipient tuberculosis ,and they will travel from Dan to Bersheeba to find a doctor who will tell them that it is nothing but "liver complaint" —whatever that may imply. Yes, sir; and they pay him their money and come home to die on your hands gratis.

Thirty years of active practice has satisfied me—althouge I started out to be truthful with my patients—that it is not, so to speak, the proper caper, if you want th retain practice. You must hide the truth in metaphor, or straddle it in medical jargon, but some how or other you must avoid telling the truth. Why, I have known instance after instance where patients have solemnly rssure me that the solid truth was the material they were after, and that they were able to stand it. I say, I have known them, as a rule, to go right off into disquietude and quackery.

Right heare comes the luxury of lying. Now, when I speak of lying, I don't mean one of those pestiferous, measly lies that crawl about and do mischief, but a lie grand in its proportion and colossal in its appointment, a lie of sufficient strength to overcome truth, and, for the time being, make you master of the situation.

Of course, it requires some gall to look a patient in the eys and tell him what you know to be a point-blank lie, but so long as it is for his interest as well as your own, it is a necessity, aye, a luxury.

DEATH AT THE COMMENCEMENT OF CHLOROFORM INHALATION.

Our Birmingham correspondent writes:—"A curious death occurred here recently during the administration of chloroform. A lady, about 25 years of age, of very nervous excitable temperament, desired to have some teeth extracted, and insisted upon an anæsthetic. In the presence of her husband and the dentist, her medical attendant administered chloroform. The patient was sitting in an easy chair, and, after inhaling a few breaths of chloroform, she slipped down in the chair, and her pulse and breathing were both found to have stopped. Artificial respiration was at once resorted to, but without success. It seems perfectly clear that the patient was not anæsthetised when she died, as she had only just commenced to inhale the chloroform, and, of course, no attempt had been made to extract her teeth. The coroner's jury returned a verdict that death was due to syncope, and that no blame whatever attached to the administrator."—Syncope, as has long been known, will result from any very violent emotion and especi-

ally from the effects of fear. In a case recorded in Germany a few years back, a female patient visited a dentist, and requested him to extract some carious teeth, demanding, at the same time, that she should be chloroformed. The dentist, very properly, explained the risks of chloroform, and suggested nitrous oxide; but his patient persisted, and he consented to humor her. Having, however, a wholesome dread of chloroform, he substituted eau de-Cologne, and bade her inhale the supposed anæsthetic from a folded towel. After two or three inspirations she suddenly fell from the chair, and died. That death occurs from fear in some cases during the earliest stage of chloroforming is unquestionable; and as it is predisposed to by the sitting posture, and by forcibly restraining the patient's voluntary movements, there can be very little doubt that in every case in which chloroform is to be administered, the recumbent posture should be insisted upon, and a loose dressing gown substituted for the usual workaday costume. There is another point of no small importance, which is that chloroform increases the liability to death from "reflex syncope." A person partly under chloroform is more apt to die from fright than one to whom chloroform has not been administered. Nor must it be forgotten that deaths occur when only one or two inspirations of chloroform have been taken; this is liable to take place when a too concentrated vapor (that is, one of greater strength than 4%) is employed. In the event of syncope occurring in one of the ways above indicated, the line of treatment which offers the greatest chance of success is total inversion of the patient, while care is taken that the rima glottidis is maintained patent for entrance of air. Dr. Chisholm, who has strongly supported this, Nelaton's original manœuvre, has recorded some highly instructive cases, in which the method of inversion, being properly performed, effected resuscitation, and so saved the patient's life. But here a caution must be given. Nelaton's method is valuable only in primary syncope, and is absolutely dangerous in cases of heart failure, consecutive upon pulmonary engorgement and overfilling of the right heart; or, in short, when respiration stops before the heart ceases to beat. Cases belonging to this last category do not occur, as a rule, until the later stages of chloroformization, and the respiratory failure is then due to overdosage with the anæsthetic.—*Brit. Med. Jour.*

THE ACIDS OF THE STOMACH.

There is no doubt that the chief acid found in the stomach during natural digestion is free hydrochloric acid. This has been abundantly proved by Bidder and Schmidt, and numerous observers succeeding them. The methods used are, however, too long and too complicated to employ in clinical work. The physician wishes to know what, in a particular case of disease, are the chemical changes going on in the stomach: whether, for example, hydrochloric acid is present as well as pepsin and organic acids. Now, in the examination of the contents of a diseased stomach three forms of acid may be present—hydrochloric acid, a mineral acid; organic acids, such as lactic acids, butyric etc. ; and thirdly, acid phosphates. It is chiefly of importance to determine the presence of hydrochloric acid and of organic acids. Many methods have been proposed for doing this; they consist mainly in testing the effect of the stomach contents on various colored solutions. Thus a solution of methyl-violet is decolorised by hydrochloric acid, so that if this reaction is obtained the free acid is present in the liquid tested. Lactic acid turns the violet a dirty yellow. Tropæolin also is turned deep reddish-brown by free hydrochloric acid. Unfortunately these tests, simple as they appear, are not accurate, since the reactions are interfered with by the presence of peptones and of some neutral salts, and, as these are not usually present in the stomach contents, no reliable results can be obtained by using methyl-violet and tropæolin. They have been superseded by congo-red, which is turned blue by free hydrochloric acid, and by a solution of vanillin and phloroglucin in alcohol, which is turned a deep red by the same acid. These simple clinical tests are, however, rendered useless by the fact that they are interfered with by the presence of peptone, ammonium salts, chlorides and phosphates. In the present state of our knowledge, therefore, there is no reliable indicator for the presence of free hydrochloric acid in the stomach contents. Other methods which may be used are too complicated for clinical use. Thus ether has the property of dissolving organic acids from a liquid, leaving the mineral acids in solution. It may thus be used for separating the lactic, butyric, and other acids from the hydrochloric acid; and if in a liquid obtained from the stomach it is found that ether removes the whole of the acids present it may be concluded that no free hydrochloric acid is present. In many cases this conclusion would be an important one as a clear indication for a line of treatment. Dr. Leo has lately published a new method for the indication of hydrochloric acid which may prove useful. Leo considers the case where it is only a question of the presence of free hydric chloride and of an acid phosphate. To a few drops of the stomach contents a pinch of carbonate of calcium is added; if the acidity, as tested by litmus paper, disappears, only a free acid is present, but if the liquid is still acid after the addition of the chalk, an acid salt is present. If, moreover, organic acids be present, they must be first removed by shaking with ether before the chalk is added. It does not seem that Leo's method is one that can be applied at the bedside, because the detection of free hydrochloric acid is chiefly requisite in those cases in which organic acids are also present, as in cases of dilated stomach. At present, indeed, a ready method, suitable in clinical practice for the detection of free hydrochloric acid in organic liquids, is a desideratum.—*Brit. Med. Jour.*

THE BLOOD-TAX OF INDIA.

Recent official publications of the government of India show that last year five-and twenty thousand human beings were killed by snakes and wild beasts out of a population of about two hundred million. This number is in accord with the past, and may be looked upon as a regular life charge upon the country. Human life is so cheap in India, however, that perhaps the destruction of property is more felt by the natives. Thus, in 1887, more than sixty thousand head of cattle were destroyed.

The snake is the chief enemy to the human animal, killing annually about twenty thousand people. Of the wild beasts, the tigers and leopards are estimated together to kill about twelve thousand people and fifty thousand cattle, the higher game being especiallythe food of the bigger cat. Most of the snake-poisoning is the result of an accident. The serpent strikes when trodden on or otherwise interfered with, and is rarely the first aggressor. But one snake—the *Ophiophagus Elaps*, of Inda—assails and charges man even more savagely and actively than does the tiger himself.

A feeling of blame against the British rulers is the first emotion which such statistics as these give origin to when read; but the problem is so complex and difficult that its present solution seems impossible. The tiger and leopard ought to be exterminated, although some English lovers of sport urge that they should in fact be protected, and that there should be a "close time" when killing of them should be unlawful; but the chief difficulty is with the snake. He permeates the land,—denizen not only of forest, jungle and hill-side, he haunts the cities, nestles in the habitations of men and beasts, roams over fields, roads, and gardens,—an ever-present spectre of death. Only by a determined persistent uprising and continuing battle of a whole people could his numbers be distinctly lessened. But in some places the old serpent-worship lingers, and the Hindoo greets the snake rather as a friend, or honors him as a guest, to be reverenced as well as feared.

Sir Joseph Fayrer believes that there ought to be a special governmental department having charge of this matter, although he himself writes, "The people should bestir themselves." The apathy of the Hindoo seems, however, unconquerable. The tiger and leopard eat the Hindoo, his family, his cattle; the bear and wild boar assault him; the wolf, the cowardly hyena and mere jackal lie in wait for his children and other feeble folk, while every hour of the day and the night the snake strikes him with steady and certain death. Yet he bows his head as though helpless and doomed of the gods. The Anglo-Saxon energy may, perhaps, be able to awake him, but we very much doubt it. Is it also not impossible that the terrible struggle for the mere necessities of life in which the Hindoos pass their existence, has engendered a sort of race instinct that the land is so overcrowded that death of individuals is better for the mass, and so infanticide is encouraged and the annual tribute to the minotaur of wild beasts paid with indifference if not with willingness.—Ed *Ther. Gaz.*

Novel Method of Reducing Dislocations of the Hip.—Prof. Lewis A. Stimson, of New York (*N. Y. Med Jour.*), in several cases has accomplished reduction in this way: The patient is brought to the edge of the bed, table, or other support, placed across the bed so that the hips project, turned upon his face, the sound limb held horizontal by an assistant, and the injured limb allowed to hang down, the leg being supported at right angles to the thigh by graspiug the ankle. The weight of the limb soon,causes the muscles to relax, when reduction is easily effected by a sudden push downward by the surgeon's hand placed in the hollow of the the knee. If the weight of the limb is not sufficient to tire the muscles, a weight can be placed on the leg in the hollow of the knee. Bigelow refers to this method in his monograph on the hip.

Dietetic Treatment of Bright's Disease.—The treatment of chronic renal affections by special forms of diet has recently been the subject of a series of investigations by Professor Schreiber, of Königsberg, whose results are of some interest in view of the present positon of the question. He traverses Senator's statement that one ought in cases of albuminuria to forbid the use of eggs, holding that their injurious influence is open to question (*The Practitioner*). He took for the purposes of experiment eight people suffering from kidney disease, to whom he gave along with their ordinary diet six to ten eggs daily. Before the beginning of the experiment they had been under observation from four to eight days, on the usual diet, until the fluctuations in the amount of albumen in the twenty-four hours had been determined; the estimations being likewise made for several days after the eggs were discontinued. In four of the cases the eggs were administered boiled; in the others, raw. In the former group the patients received six eggs daily, and in none of them during the period of administration of the nitrogenous food could any fluctuation or increase in the amount of albumen be determined. In the second group, six to ten raw eggs daily not only did not show an increase in the excretion of albumen but actually led to a considerable diminution. Similar results have also recently been recorded from Leyden's wards. These observations also agree with those of Oertel, who has stated that the addition of a great quantity of albuminous food may affect albuminuria favorably. Schreiber maintains that none of the three forms of diet—mixed, meat, or milk—appears to be capable of influencing constantly and unmistakably the excretion of albumen in kidney disease–a result, he thinks,although really negative, to be nevertheless received with satisfaction when one considers that patients can never stand for any time a one-sided diet. In discussing the question how a patient suffering from Bright's disease ought to be dieted, Schreiber recommends that to an ordinary mixed diet should be added fluid or coagulated albumen, meat and other nitrogenous substances, and as there is not less albumen passed under a pure milk-

diet than under a nitrogenous one, it succeeds better to combine the two and adds to the body-weight. A special diet for Bright's disease is not in the least indicated; it ought to be founded on the broadest basis, bearing in mind that the disease is an affection gradually and steadily consuming the bodily strength; while the forms of diet should be given according to the want and necessity, and without the unjustifiable and exclusive endeavor to compensate or change the loss of albumen by the urine.—*Med. Rec.*

Relation Between Chlorosis and Menstruation.—Basing his remarks on an analysis of 232 cases, Dr. Stephenson advances the following opinions: Dividing the cases into two groups–primary, in which the attacks occurred before the 23d year, 183 n number, and those cases in which the disease occurred as a relapse after a peried of good health, 49 in number–he showed that, although chlorosis is due to a constitutional state, it is by no means necessarily associated with poor body development, or with defective health previous to its appearance. By tables it was shown that the chlorotic diathesis tended to accelerate the age at which the cata menia appear, and is not, in itself, a cause of the retardation of menstruation. But in one half of the cases func tional activity was defective, and characterized by irregularity and lengthening of the intermenstrual period and scantiness of the amount of the flow. Two marked chlorotic periods were demonstated by the tables—the primary, occurring between the ages of fourteen and twenty-one, and that of the secondary attacks between the ages of twenty-four and thirty-one. Two cases were recorded in which the attack occurred at the ages of thirty-nine and forty-one. The general conclusion reached was that imperfect evolution of meustruation, as evidenced by the scantiness of the flow and the irregularity of the periods, was as regular a feature of chlorosis as was the imperfect evolution of the red corpuscles of the blood. These constants are independent of each other, but so related that the reproduction or formation of the erythrocytes forms parts of, or is governed by, the menstrual cycle, both being influenced by a greater rhythmic action which determines the time and activity of development, growth, and reproduction. The author was sceptical as to the existence of the so-called menorrhagia of chlorosis.—*Obstet. Gazette.*

Misapplied Ingenuity.—An Indian contemporary narrates some curious instances of misapplied ingenuity on the part of certain habitual criminals in that country. The discovery on a prisoner of a heavy leaden bullet, about three-quarters of an inch in diameter, led to an inquiry into the object to which it was applied. It was ascertained that it served to bring about the formation of a pouch-like recess at the base of the epiglottis. The ball is allowed to slide down to the desired position, and it is retained there for about half an hour at a time. This operation is repeated many times daily until a pouch of the desired size results, in which criminals contrive to secrete jewels, money, etc., in such a way as to defy the most careful search, and without interfering in any way with speech or respiration. Upward of twenty prisoners at Calcutta were found to be provided with this pouch formation. The resources of the professional malingerer are exceedingly varied, and testify to no small amount of cunning. The taking of internal irritants is very common, but would-be inpatients very frequently over shoot the mark and render recovery impossible. Castor oil seeds, croton beans, and sundry other agents are employed with this object in view, and the medical officers of Indian prisons have to be continually on the lookout for artificially-induced diseases, which baffle diagnosis and resist treatment. Army surgeons are not altogether unfamiliar with these tricks, but the British soldier is a mere child in such matters compared with the artful Hindoos.—*Medical Press and Circular.*

OBITUARY.

PHILLIPPE RICORD, M. D.

The great syphilographer and surgeon died at Paris, France, on October 23, at the advanced age of eighty-nine. He was an American by birth and rearing, though this fact is not generally known. Born in Baltimore on December 10, 1800, he went to Philadelphia at an early age with the object of studying medicine. When he was twenty years old he went to Paris, where he graduated six years later, and immediately began the practice of his profession near Orleans, at a small town called Olivet.

He was appointed surgeon-in-chief of the Hospital des Veneriens du Midi at Paris in 1831, having removed to that city several years previously, and this position was held by him with great credit until his retirement in 1860.

The reason assigned for his retirement was age, but he did much of his best work in later years. It was while filling the post above mentioned that he earned for himself the fame and honor which attaches to his name as a specialist in venereal diseases. He became Physician in Ordinary to Prince Napoleon in 1862, and in 1869 he was appointed Consulting Surgeon to Napoleon III. During the siege of Paris he filled the post of Chief of the Ambulance Corps, and for his services was made a grand officer of the Legion of Honor.

It is gratifying to note that his ability did not go unrewarded, and though he was honored by many decorations, both French and foreign, recognition of a more substantial character was not lacking. It is unnecessary to speak of him in eulogy; his name and work are known throughout the civilized world.

ORIGINAL ARTICLES.

THE ETIOLOGY OF ALOPECIA AREATA.

BY JOSEPH GRINDON, M.D.,

Clinical Lecturer on Diseases of the Skin at the St. Louis Medical College.

Read before the St. Louis Medico-Chirurgical Society, October 15, 1889.

The true etiology of alopecia areata has long been a matter of dispute among dermatologists, one school holding. the disease to be a pure tropho-neurosis, and therefore non-communicable, and the other attributing its causation to some vegetable parasite, and in consequence believing it to be contagious.

The American school seems to be pretty uniformly of the opinion first mentioned. Thus Duhring says, "it is non-parasitic in its nature, and is not contagious. The origin is beyond doubt to be found in a peculiar functional nerve disturbance, causing impaired nutrition."

Van Harliegen says: "Two theories have for some years past divided dermatologists, the neurotic and the parasitic. Against the latter view we have the fact that the clinical appearances presented by the disease are in no way like those of other vegetable parasitic skin diseases, and also that each discoverer of fungus in the disease depicts a different variety from all previous observers. Finally also antiparasitic remedies have no effect toward the cure of the disease.

On the other hand Genby in 1843 described a fungus consisting of spores and mycelium, the former being small and scanty and the latter present in great abundance, which he considered to be the cause of the disease. Many prominent French and English authorities, among them Bazin, Hardy, Hutchinson and Tilbury Fox adopted these views. Thin, however, in '82 described what he named Bacterium Decalvan consisting of minute bodies of uniform size arranged end to end in twos or threes on the hair shaft or in the root sheath.

Many instances could be drawn from the literature of the subject illustrative of the facts brought forward by many European observers to prove the contagious nature of the disease, but we will limit ourselves to one of the most striking, quoted by Anderson from Dr. Hillier, which is in substance as follows: In a large parochial school containing from 1,100 to 1,200 children of both sexes and from six to fourteen years of age, a number of children were found all at once to have on their heads patches of baldness, quite smooth and pale. The number of children affected was forty-three, and they were all girls from seven to fourteen years of age, who lived together. There was no case of the kind among the infants or among the boys who occupied a separate part of the building. On more careful inquiry it was ascertained that one girl had been suffering from this disease of the scalp in an aggravated form for one or two months, and had been allowed freely to associate with others.

Anderson,notwithstanding, approves of Wilson's conclusion that "pathologically we must regard aopesia areata as a suspended innervation, as a kind of paresis of innervation."

How are we to reconcile these conflicting opinions, emitted by men of equal authority? What are we to do with a mass of conflicting testimony with which the text-books and current literature are replete?

We have reason to hope that the dispute is at last coming to an end, settled as all disputes—of a scientific nature at least—should be, by a better understanding on both sides. The French now recognize two affections characterized by similar objective signs, retaining for one which they regard as parasitic the old name of *pelade*, heretofore equivalent to our alopecia areata, while that due to a defective innervation they denominate *peladoide* or *pseudo-pelade.*

The wide divergence between the natural histories of these two affections may be exemplified by a few references to the modern literature of the subject. Thus M. Besnier in a recent report to the Academie de Medicine gives a long list of prophylactic rules to be observed in asylums, barracks, schools, etc., based on isolation and disinfection. He finds a proof of the communicability of the disease in its frequent appearance in groups. Its irregularity of distribution is, according to him, a point of resemblance to the diseases known to be of parasitic origin, such as ringworm, while its march and general characteristics are not such as one would look for in a pure tropho-neurosis.

The physicians of the Hopital St. Louis are said all to agree with him in regarding the affection as contagious.

Now the cases of alopecia areata which have come under the eye of the writer presented none of the phenomena enumerated by M. Besnier. They did not occur in groups. Their distribution was not irregular but often markedly regular, while their march and characteristics was as a general thing quite such as one would look for in a tropho-neurosis. Indeed in most of the cases a neurotic disturbance as the basis of the manifestations at the surface would have been suggested to the most superficial observer.

Again M. Besnier makes the remark that *pelade* and the tineas are found under precisely similar conditions, whereas alopecia areata has been found on this side of the water to be much more common among the upper classes, while the contrary is true of the avowedly parasitic diseases. McCall Anderson says that the same is true in the city of Glasgow, Scotland.

Hallopeau stated before the recent Paris Congress for Therapeutics that while the parasite of *pelade* was still unknown, clinical facts permitted us not only to affirm its existence, but to determine its location at the surface of the hairy scalp, as was proven by its contagiousness.

He accordingly recommended the use of caps to be changed nightly, and the daily disinfection of combs and brushes, with successive blisterings of the diseased patch, and a sublimate lotion to the still healthy portion of the scalp. This treatment should, according to him, produce a cure in 3 or 4 months.

Robinson's investigations lead to somewhat different conclusions. He showed the presence of zooglea masses of micrococci in the lymphatic spaces of the corium. He thinks it probable that these constitute the true cause of the disease, and, what reads oddly when one remembers Hallopeau's statement, he thinks that their being so deeply seated accounts for the *non-contagious* character of the affection, and for the frequent failure of antiparasitic treatment. He considers the true seat of the disease to be in the lymphatics, giving rise, secondarily, to inflammatory changes in the corium, which finally result in partial or complete atrophy of the sebacious glands and hair follicles.

The manifest existence of alopecia as a symptom of disturbed nerve-supply was well shown by Max Josephs in a number of experiments with cats. He demonstrated that incision of the second cervical ganglion is followed by a loss of hair, and Mibelli in the *Giornal Ital. delle Malat. Ven e della Pelle*, gives the results of his repetitions of Josephs' work. In a few cases there were no results, and in the others a resulting baldness either within the area of nervous supply of the ganglion or outside it, or both. He is inclined to attribute the phenomenon to a lesion of nutrition in the skin and not to a pure tropho-neurosis.

Many clinical facts, were it necessary, could be adduced from the literature of this subject to establish beyond a doubt the existence of the relation of cause and effect between nerve injury and baldness.

I shall now relate a few cases of the disease which have come under my personal observation.

Case I.—K. T., female, æt. 22 years, single; at clinic of St. Louis Medical College; lower half of occiput and a patch behind and above each ear denuded of hair.

Her mother says these have existed since her first year, when she had some lesions on the scalp, which were limited to the areas covered by the patches mentioned. Since then another patch of denudation has appeared at the middle of hairy margin of forehead. The alopecia is thus perfectly symmetrical. Some new hair has appeared on these patches within the last 6 months. The occipital patch has been itchy within the last year and presents some erythema.

General health and appetite fair, some bloating of abdomen after eating—vomits easily—subject to colds which are generally accompanied with local herpes. Some pain over left ovary—menses are scanty. Her mother has an erythematous eczema of face.

Case II. M. H., female æt. 27 years, married, at clinic of St. Louis Medical College;has 3 children; weaned the last one 4 months ago after nursing it 14 months.

Alopecia appeared 2 years ago while nursing second child which was then 6 months old.

There is a denuded strip beginning 1 inch behind the anterior hairy margin and extending back along the median line for 5 inches. It is 1 inch wide posteriorly and runs to a point in front. Has been subject to attacks of supra-orbital neuralgias for a year; these occur during menstrual epochs and at times when nursing and not menstruating.

The patch of denundation itches at times.

During neuralgias objects looked at often appear to be in oscillatory motion.

Internally zinc phosphide and nux vomica, locally liquid ammonia. Hair otherwise luxuriant.

Case III—.Mrs.M., æt. 55 years, clinic St. Louis Medical College; thirty years ago began to suffer from intra-ocular and supra-obital neuralgia. Three years later her hair began to come out gradually. The scalp is denuded over a surface extending from a point 1 inch behind the anterior hairy margin backward along the median line for 5½ inches. The patch is triangular with the base, 4 inches wide, posteriorly. The nails of the ring and little fingers of both hands are thin, furrowed and brittle, the others normal.

The neuralgias disappeared spontaneously 4 years ago.

Case IV.—Mrs. M. B., æt. 26 years, at clinic of St. Louis Medical College, March 1, 1885; health fair until within last 6 months, with exception of occasional attacks of ill defined weakness and fainting spells dating from childhood; chills six years ago, and a pneumonia 1 year ago; was married 9 months since; there has been no pregnancy. Menses scant and irregular; patient looks anæmic; appetite poor; bowels inclined to be costive; Has occasional pain in abdomen. Throat feels sore; reveals simply hyperæmia on examination. There are a few tender spots on costal cartilages and shins. Patient says she had some spots on her breast six months ago which disappeared in a few days. No history pointing to syphilis obtainable besides that mentioned.

The hair of the scalp began to come out 2½ months ago, a bunch came out day before yesterday. The hair is thin everywhere with patches of complete alopecia in places. These are symmetrical and over vertex anteriorily, occiput and a little below parietal eminences on each side. April 6, a great deal more hair came out.

May 11. Alopecia progressing in a symmetrical manner. The nails of the thumb, index and middle fingers of the right hand and thumb of the left are thinned and depressed below the normal level for their distal halves, as also is the distal radial quarter of the left index nail.

July 27.—Alopecia of scalp complete, not even lanugo hairs to be seen. The nails have grown out better. The hair is thining about pubes and axillæ. Menses have returned twice during the month. General health improving under iron, arsenic and saline laxatives.

Patient did not return until the following May, being absent from the clinic for ten months. Had suffered during the winter with what she called rheumatic

pains, in the back, hips, knees and heels. Alopecia of middle third of right eyebrow. These hairs came out recently in a bunch. The eyelashes, left eyebrow and remaining portions of the right include all the hairs on the body, the alopecia being otherwise complete.—The patient never returned.

Case V.—S. W., widow, æt. 29 years, clinic of St. Louis Medical College. Patient has enjoyed good health all her life with the exception of a period two years ago when she suffered with severe headaches; these returned five months ago and have been accompanied with a gradual and symmetrical loss of hair. There is now marked alopecia in the median line anteriorly and over the temporal regions.

Case VI.—P. S., male, æt. 18 years; clinic of St. Louis Medical College. Has a patch of partial baldness about the size of a fifty cent piece, a little above and behind the right ear, which has existed five months. The fall of hair has been gradual. The skin of the involved area appears normal. There is a cicatrix and depression of the scalp a little above and on the same side where patient received a blow when five years of age. There are some acne and comedones about face. Patient has never had syphilis and has never been sick abed for any time.

Case VII.—Mrs. N., æt. 25 years, private patient, youngest child is 12 years old. Suffered formerly from uterine disease but is now free from aches or pains with exception of trigeminal neuralgia, extending to side of head posteriorly; generally has one attack before and after each menstruation. These are accompanied with hemiopia and an oscillatory tremulousness of visual images. Is very nervous. Alopecia has existed three years. The entire scalp has been invaded at one time or another with the exception of the occipital region, the hair reappearing at one place to fall out at another. The new hair is at first of the lanugo variety and very light in color; gradually growing darker and stronger, so that there now exist several shades of hair offering marked contrasts. There is now a circular bald patch about two inches in diameter, a little to the right of the median line anteriorly, and two smaller patches posteriorly disposed symmetrically in respect to the median line. The hairs come out singly, the patient says she scratches them out, as the patches itch.

Case VIII.—Mr. M., æt. 34 years, single, private patient. An over-worked business man, looks robust and has always enjoyed excellent health with the exception of occasional recent "girdle pains" at level of nipples. A brother, æt. 40 years, has been a confirmed epileptic since the age of 21, disease first appearing after a typhoid. His father, still living and in good health, at the age of 71 years, had what he called a ringworm at 25, this was a small patch which spread until the whole vertex was cleared of hair. Patient, six weeks ago, noticed a bald patch the size of a five cent piece, a little below and behind the vertex on the right side. This has extended peripherally, and is now as big as a silver dollar. There are no subjective symptoms. The hair bordering the patch looks normal. The involved scalp is thin, pale, smooth, shining and depressed.

The hair came out gradually, so that none was ever found loose.

A month after first visit a new patch smaller than the first appeared more anteriorly. No sign of a return of hair on the first.

Of these cases, the first shows no marked neurotic influence, unless evidenced by symmetry. Cases II, III and VII, all symmetrical, were associated with marked neuralgias and Case V, also symmetrical, with headaches the character of which was not learned.

Case IV in whichthe alopecia was symmetrical, not limited to the scalp, and accompanied with atrophy of the nails, permitted more than a suspicion of syphilis. Case VI suggests a possible traumatism. Case VIII exhibits interesting elements of heredity and family history.

In no case was there any fact elicited which might sustain a hypothesis of contagion.

The question of the etiology of alopecia areata is not alien to the domain of the general practitioner, as the existence of the disease, or rather symptom, may at times furnish him with a valuable hint as to conditions existing below the surface. Professor Letoir, of Lille, has pointed out this fact. While speaking of "warning dermato-neuroses" he cites a case in which a patch of non-parasitic alopecia areata announced in advance the onset of a clearly defined syphilitic cerebral lesion, and another, in which the same affection preceded by a short time a cerebro-spinal syphilis under the form of general paralysis.

In conclusion then, I believe that under the name of alopecia areata are included:

1. An affection or several affections due to the presence of parasites, which affection or affections must be rare in this country, and 2nd. Cases symptomatic of some disturbance of innervation. These cases might well be included under the head of Alopecia Neurotica by somewhat extending the limits set by Nicholson in introducing the name.

HEREDITY IN DISEASE.

BY JOHN SCHILLING, M. D.

At the last meeting of the Mississippi Valley Medical Association, when discussing the papers on tuberculosis, the question naturally arose, Is tuberculosis hereditary or not? On that occasion so many different and even antagonistic views were brought forward that the following lines will perhaps not come amiss, especially to those members who carried on the discussion. In the latter my modesty did not permit me to take part, therefore I write this for the Weekly Medical Review.

Although heredity of tuberculosis was then considered I shall not restrict myself to that disease alone,

but treat here of heredity in general. A healthy and vigorous bodily constitution is one where the tissues, and consequently the functions, are normal. The constitution is broken down, impaired, diseased, below par, when the tissues are abnormally changed. This takes place, firstly, as the result of too much or too little functional activity, viz., over- or non-use of the tissues, or exposure to cold, heat and fatigue, or inadequate construction-material, viz., want of food, bad food, or abuses in the ingestion of alcohol, opium, etc. Secondly, infective disease, such as tuberculosis, syphilis and indeed all acute diseases, leave the tissues in a somewhat impaired condition; and although health may be re-established it is never quite so perfect again as it was before the attack of illness.

There is a general principle in nature that the offspring resembles the parent to a certain degree. A constitution is inherited, we say. Two healthy parents have sound and healthy offspring. Of course there are exceptions to this. If during gestation a healthy woman is subjected to an injury or suffers from inanition, etc., it will influence her blood, hence the food-supply of the fœtus, and thus cause some abnormal development in the form, organs or tissues of the fœtus.

If, on the other hand, the parents' constitution is impaired, broken-down, the sperm- and germ-cell and the subsequent fœtus suffer proportionately. This broken-down constitution may have all degrees. The destructive process may have gone so far that the parents are completely sterile. It may have gone only so far that the ovum perishes after two months' gestation. Or the fœtus may die at six months or at full term. Or the child may be born alive, but too lowly organized to live long, or, lastly, the offspring may be but little short of perfect health. We can well understand that the viability and vigor of the child depends upon the condition of the parents' health during the process of its formation. It is evident, too, that the child has lower vitality if both parents have been constitutionally below par than if either one alone. Now it does not matter what caused the broken-down parental constitution, whether tuberculosis, syphilis, exposure or insufficiency of food; this condition of dissolution of the tissues and of defective organization is stamped upon the germ- and sperm-cell, so to speak, and grows with the being originating from these—"it is inherited by the offspring." This inherited constitution has been called, variously, scrofulosis, cachexia, marasmus, etc.; but let me say here that all these names mean essentially the same defect, differing only in degree, and this again depends upon the extent of the parental disease which caused the imperfection of the fœtus. Thus, also, a diathesis means but a lesser defect in the organism or a lesser resisting power of the tissues to disease processes, to injuries and to the inroads of bacteria. So that no particular disease is inheritable as such—not even insanity. For instance, a mother has a local defect—a cicatrix or an old cavity in her lung, the remains of an arrested process of tuberculosis; her vital powers have been lessened during the active stage of the affection; her tissues are no more quite perfect; the ovaries and the germ-cells have shared likewise in this process of dissolution. But there are no more bacilli in the blood or in the tissues at large, neither in the germ-cells. Besides, how can the bacilli enter the minute germ or sperm-cells before fecundation so as to make them tuberculous, syphilitic, etc.? This would surely cause their destruction, at least their sterility. Now, the child developed out of them has the same tissue-organization, the same weak vitality or lessened resistance to processes of disease. If it be injured by a fall, by cold or by a blow, the respective tissues will undergo destruction sooner and more readily, the more pronounced this diathesis or systemic weakness is. If the child is then exposed to bacteria—and where is one not exposed to these fiends?—they will immediately take hold on these weak spots and aid materially in the destructive process. And according as these microbes are bacilli of tuberculosis or of syphilis, or of osteomyelitis, etc., the established disease will be one of tuberculosis, syphilis or osteomyelitis. Therefore the assertion that the offspring inherit a liability to a certain disease—a diathesis—is wrong. They inherit simply a liability to any disease, not to that one alone which their progenitors have. The inherited lower vitality, imperfect development, defective tissue organization, is liable to succumb to the ravages of any disease-germs. That, however, the children mostly possess the same disease as their parents, is self-evident from the fact that they are mostly exposed to that disease. They are, later on, infected by actual contact, as a kiss, or by inhaling infected air.

Finally, there is one event which usually takes place together with inheritance and which has been mostly confounded with it, and that is transmission of a disease from mother to child in utero. But that is not heredity at all; that is really infection. And by that any particular disease is transmissible as such. So a tuberculous or a syphilitic mother will have a tuberculous or a syphilitic child. The respective bacilli swarming in the placental blood can enter the fœtal circulation or tissues.

Insanity is likewise not inheritable as such, although it is claimed to be so. An imperfect arrangement of the nervous centers, destruction of the nerve-tissues, nerve-fibers or cells by tubercles, gummata, circumscribed tumors, narrowing of the axis-cylinder, lack of inter-central connections, compression of the cells, atrophies, sclerosis, etc., similar to the defective organization of any other tissue in the human body, are inherited by the offspring. And if to such conditions, which make the individual already hypersensitive and hyperconvulsive, the exciting cause be added, there will be an outbreak of emotional insanity.

In conclusion let us recapitulate the following points:

First—heredity of an impaired constitution. A diathesis to all diseases, not to a particular one, is inherited if the parental constitution is broken down by in-

fectious or non-infectious processes, by diseases or other injurious circumstances. In this case the mother must be free from infection, or the latter must be at least quite local, as a small tuberculous area in a lung, for instance. So far we can speak of inheritance.

Secondly. If the mother is still infected the respective disease is transmitted to the fœtus in the regular manner of infection. *A priori*, it is evident a disease is hardly ever or never inherited as such, but is always acquired; although an inherited diathesis is sometimes so severe as to be itself called a disease.

REPORT ON PROGRESS.

THERAPEUTICS.

BY FRITZ NEUHOFF, M.D.

Sulphur in Sciatica.

The patient, a young man who had previously suffered from attacks of sciatica which had proved very rebellious to treatment, was suddenly taken with severe pain in the left leg extending from the sciatic notch to the ankle. The whole limb became stiff and cold. It was determined to try a plan of treatment which has proved eminently successful in the hands of Duchesne. The affected limb was placed on several thicknesses of cloth thoroughly sprinkled with sublimed sulphur. The dressing was kept in place by a roller bandage. Next morning all the pain as well as the stiffness and coldness had disappeared. The dressing was removed and in a few days the patient was well. No relapse occurred.—Dr. Barthel in the *Deut. Med. Zeit.*

Geranium Maculatum.

In the *Atlanta Med. and Surg. Jour.* John Shoemaker, M.D., reports the following cures by drachm doses of fluid extract of geranium maculatum: two cases of incipient phthisis, one case of gastric ulcer.

By local use of a twenty per cent solution of the same preparation two cases of buccal ulceration and one case of urethral hæmorrhage and gleet were quickly relieved. A twenty-five per cent solution cured an anal fissure. Metrorrhagia following abortion was checked by intra-uterine injection of a pint of water containing a half ounce of geranium.

Death From Sulphonal.

In the *Med. News*, August 10, 1889, Dr. R. R. Petitt reports a death from two 15 grain doses of sulphonal administered at an interval of one and a quarter hours. The case was one of insomnia in an insane woman aged twenty-eight years. The patient died 40 hours after taking the medicine, although vigorous and timely efforts to combat death were resorted to. Respiration failed while the pulse was still good.

Chloral Hydrate in Chancroid.

In cases of excessively painful chancroid Dr. Gross recommends as a wash:

℞ Chloralis, - - - - gr. viii.
Aquæ destillat, - - - - - ℥i.
M. Sig. Apply on cotton.—*College and Clin. Rec.*

Antipyrin in Diabetes.

Several writers report success in the treatment of diabetes mellitus by antipyrin in doses varying from two to six grammes daily. In some cases all sugar disappeared in a few days. In other cases the amount of sugar was greatly diminished.

Treatment of Gastric Ulcer.

In the *Canada Lancet*, Dr. Ord describes his treatment for gastric ulcer as follows:

1. Complete physical rest of the whole body.
2. Physiological rest of the stomach.

Patients who can do so with impunity, may take milk, eggs and farinaceous foods.

Those who can take meat juices only, and those who can take no food at all by the mouth without pain, must be nourished by the rectum. Fluid enemas when they can be retained are more effective than nutrient suppositories. A good formula is two ounces each of beef-tea and milk, with one drachm of liquor pancreaticus prepared at a temperature of 98° F. Egg may in certain cases be added, and where there is great exhaustion, a small amount of brandy.

3. Treatment by drugs.

When there are no symptoms of gastric catarrh, give 20 grains of carbonate of bismuth with 10 grains of carbonate of soda and 10 drops of tincture of belladonna three times a day. If much gastric catarrh exists, it may usually be speedily relieved by 10 grains of bicarbonate of potash, 3 grains of iodide of potash, and 3 drops of dilute hydrocyanic acid in infusion of gentian three times a day. Subsequently the bismuth mixture must be given, and as a rule in uncomplicated cases a cure of the ulcer will result. Hæmorrhages should be combatted by relieving their causes, namely gastric and hepatic congestions. Constipation is met by sulphate of magnesia, administered early in the morning.

As Dr. Ord says, the above treatment when thoroughly adhered to, as a rule will cure an uncomplicated gastric ulcer. But it is difficult, according to our experience, to get patients to submit unconditionally to the doctor's instructions, especially those relating to dietary restriction; for it has been truly said, a hero is that man who can refrain from eating what he knows will not agree with him.

Iodoform in Diphtheria.

In a communication to the *Boston Med. and Surg. Journal*, Dr. W. Lindley, of Los Angeles, Cal., states that he has treated nine cases of diphtheria by liberal insufflation of iodoform every three hours. Of this number four had very large amount of albumen in the urine, and all but one recovered. The fatal case died from intercurrent pneumonia. This experience certainly warrants further trial of iodoform in diphtheria.

Dr. Lindley supports its use by the following theoretical arguments.

1. It prevents the multiplication of bacteria.
2. It is a soothing local anodyne.
3. It is like alcohol, in having no toxic dose where the patient is suffering from the diphtheritic poison.
4. It is so near impalpable that it reaches all portions of the diseased surface.
5. It adheres for a long time to the surface where it is applied, and thus has excellent local effect before it is absorbed.
6. It does not cause nausea, and thus interfere with nutrition.
7. It does not produce diarrhœa or salivation, as is possible from an overdose of the bichloride.
8. It is quickly and easily applied.

Exalgine Again.

F. Peterson, M.D. (*Med. Record*) has experimented with two-grain doses of exalgine every few hours, in twenty cases of neuralgia. Benefit was observed in about half the cases. Disagreeable effects (nausea, drowsiness, and diarrhœa) occurred in but one patient and she was addicted to the morphine habit. Two grains is a rather small dose, as the French physicians who introduced exalgine employed doses of 4 to 6 grains. Exalgine is similar to antipyrin in its therapeutic action, but the latter is a more powerful antipyretic but a less powerful analgesic than the former. Symptoms of collapse frequently caused by antipyrine have not been observed with exalgine.

Oxygen in Asphyxia.

To determine the value of oxygen in the treatment of asphyxia, Drs. Hare and Martin made a series of experiments on animals which are published in full by the *University Med. Mag.*

Dogs and rabbits were placed in air-tight boxes filled with ordinary coal gas. When life was almost extinct, the animals were taken out, and resuscitated by the aid of oxygen. After the lapse of 24 hours the animals were again subjected to the coal gas in the same manner and for the same length of time as on the previous day. After that, they were placed in an atmosphere of air.

One (a rabbit) died. The rest recovered, but only after a period of time in each case exceeding by several minutes the time consumed in their resuscitation when assisted by oxygen.

Therapeutic Action of Senna-pods.

Dr. McFarlane (*Lancet*) finds the infusion of senna-pods to be entirely free from the nauseous taste and irritant properties which characterize the infusion of senna leaves. Taken internally the preparation made from the pods will cause one or two soft evacuations. No flatulence, griping or pelvic hyperæmia are produced. In nursing women no purgative properties are imparted to the milk. In constipation from intestinal torpor, the digestion is improved and natural evacuation of the bowels promoted, so that the dose of the medicine can be gradually decreased and eventually dispensed with. For an adult the average dose is from 6 to 12 pods infused in a wineglassful of cold water. For the young and very aged from 3 to 6 pods will suffice.—*Therapeutic Gazette.*

Pilocarpine in Jaundice.

According to Dr. Witkowski (*Nowing Lekarskie*), hydrochlorate of pilocarpine is a specific remedy for hepatogenous jaundice when not due to malignant or benign growths of the liver. The doctor uses the drug hypodermically in the shape of a 2% solution. Of this he injects a (Pravaz) syringeful once a day in delicate persons, and twice a day in stronger ones. On the fourth or fifth day, the dose is increased to one and a half syringeful. All subjective symptoms (itching, hepatic and gastric pain, etc.), are alleviated after the first injection. The jaundice disappears in from one to two weeks.—*Virginia Med. Monthly.*

Hydroxylamine.

Hydroxylamine is recommended as a substitute for pyrogallic acid and chrysarobin in the treatment of psoriasis. The new remedy appears to effect a cure in less time than the old, and furthermore possesses the advantage of not staining the skin. John Fabry suggests the following formula:

℞ Hydroxylamine muriate, - 2 to 5 parts.
Alcohol, - - - - 100 parts.
Chalk sufficient to neutralize. Mix and filter. S. Apply externally at intervals of one, two or three days, according to effects.

It is best to begin with a one per cent solution, and gradually increase the strength.—*Therapeutic Gazette.*

Dioscorea Villosa—Wild Yam.

Dr. John V. Shoemaker (*Journal American Medical Association*), finds wild yam an exceedingly useful drug in the various diseases of the hepatic system. He cites the clinical histories of several cases of undoubted hepatic colic which were speedily relieved by 30 drops of the tincture of wild yam, given every half hour till the pain lessened. He states that hepatic torpor and congestion are also quickly and permanently cured by

the remedy. Even cancer and cirrhosis of the liver are palliated by it.

The suggestion of the use of wild yam in hepatic colic is by no means new, but previous to the publication by Dr. Shoemaker no careful study of its therapeutic value appears to have been made.

Iodoform in Cerebro-Spinal Meningitis.

In the weekly *Zemsky Vratch*, Dr. G. Levitzky reports a severe case of cerebro-spinal meningits in which all other remedies failed, but 2 grains of iodoform administered in pill form three times a day, caused a steady improvement and an ultimate cure.—*Med. and Surg. Reporter.*

Biborate of Soda in Epilepsy.

Dr. Munson (*Am. Lancet*) says: "Biborate of soda has been found equal to the bromides in controlling epileptic seizures, while it does not affect badly the general health.

It tends to constrict the peripheral blood vessels and is therefore most useful in epileptics with low arterial tension, but strong heart action. It sometimes causes alopecia. In one case suppurative inflammation of the middle ear was induced by it. The drug should never be given before meals, nor for long periods continuously. It is well to alternate its administration with the bromides."—*Med. News.*

Cocaine in Cholera Infantum.

In bad cases of cholera infantum, Dr. Cope (*Med. Age*) has used with great success a 4 % solution of cocaine, giving from two to ten drops every two hours. He speaks of it as a remedy to be relied upon when all otheis fail. When indicated brandy may be administered in conjunction with it.

Menthol for Pruritus.

Dr. Saalfield advises the following formula as an ointment:

℞ Menthol, - - - - parts, 5.
Bals. Peru, - - - - parts, 19.
Ol. Lanæ, - - - - parts, 200.
M. S. External use.—*Western Druggist.*

Rhus Toxicodendron.

An extensive article by J. Aulde, M.D., in the *Therapeutic Gazette* seems to establish the curative power of rhus toxicodendron in chronic rheumatism and neuralgia, (especially sciatic.)

Having himself obtained good results with the drug, Dr. Aulde sent samples of it to several physicians. Eight of these reported their experience with it in chronic rheumatism and neuralgia. Oue of them states that he has had good results, but he does not give the number of his cases. The remaining seven report in the aggregate, fourteen cases in which they tried the drug. More or less benefit was experienced in all but three cases. One of these three did not take the medicine faithfully.

The preparation employed in these cases, was a tincture from the fresh leaves, made according to the directions of the pharmacopia for making tincture from fresh herbs. The dose is half a drop, administered in five drops of dilute alcohol.

Cantharides in Leucorrhœa.

Dr. Parvin advises the use of five minim doses of cantharides t. i. d. gradually increased to fifteen, in the leucorrhœa which vicarates for menstruation.—*Medical Standard.*

Spirits of Turpentine in Post-Partum Hemorrhage.

In cases of post-partum hemorrhage, when all the usual remedies have failed, Mayne passes into the uterus, and presses against its wall a piece of lint saturated with spirits of turpentine. As a result, the uterus invariably contracts rapidly and all bleeding is checked. No disagreeable results have ever followed this treatment. Nay, in one case, when the patient was almost pulseless, it even seemed to act as a stimulant (D. M. Z.) (*St. Petersburg Woch.*)

Atropia in Hæmoptysis.

In two desperate cases of hæmoptysis, which had already resulted in syncope and in which all the usual remedies had proved powerless, Dr. Grand (*Arch. Med. Belg.*) administered $^1/_{215}$ of a grain of atropia sulph., hypodermically. The hæmorrhage immediately ceased, and the pulse increased in volume. The injections were repeated twice in the course of the next 24 hours. No recurrence of the bleeding has been noted (*Deut. Med. Zeit.*)

Ether in Lead Colic.

In lead colic, A. Torre-Brest uses "rectal inhalations" of ether as a palliative. A small vial containing about 5 grammes of ether is fitted up with a rubber tube terminating in a rectal tip. The bottle having been placed in a vessel containing warm water, the rectal tip is introduced into the bowel. In a few minutes the colic ceases, about 1 gramme of ether having been consumed. After this, the administration of 30 grammes of castor oil associated with rectal irrigation will soon cause abundant evacuations (*Deut. Med. Zeit.*)

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,
EDITOR.

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SATURDAY, NOVEMBER 16, 1889.

MALPRACTICE SUITS.

In a late number of the *Omaha Clinic*, Dr. M. V. B. Clark, of Sutton, Nebraska, relates the story of his malpractice suit, from which he escaped luckily, after the usual amount of newspaper notoriety, with no other damages except considerable mental torment. After the doctor had collected sufficient evidence to show that the suit was simply a blackmailing scheme, the action was dismissed by the plaintiff on his own motion and at his own cost. Dr. Clark's description of his feelings at the time the suit was brought, reads like a novel, and at the present time is doubtless highly amusing to the doctor's friends, as well as himself: "In about four weeks I removed the dressing and upon careful examination, found a result free from anchylosis, shortening or lameness. There was present a slight curvature, inward, having the effect to erect the foot." (The case was one of Pott's fracture in a boy, whose friends were constantly removing the dressing and otherwise interfering with the doctor's treatment.)

"Now commenced my troubles and heartaches, and when it dawned on my mind that I had not taken, at any time in the history of the case, an assistant or a good friend for a witness, who would tell the truth, I felt indeed that I was cast in the *slough of despond.* The whole outfit was jumping on me with both feet, and it can be easily imagined that I felt fully the seriousness of the situation. From their threatenings I imagined every thing would come upon me—possibly criminal malpractice as well as civil—as they had every thing in their own hands, and would swear the case straight through regardless of the truth.

Mentally, from now on my days were dark and in the shadow; my nights were sleepless and lurid, with visions of the sheriff coming up the path to take me dead or alive and I thought I must certainly be guilty of some terrible crime.

By and by I awoke out of this and my way seemed clear. I reasoned to myself that this, at its worst, is not so very bad after all, and God knows that even of this I am innocent, although I may not be able to prove it." He offered to straighten the limb in one of several ways, but this was refused and suit was brought against him. The "heavy villains" in the case were a "scalawag Swede doctor" and a disbarred lawyer.

Dr. Sutton suggests that, as a matter of protection, steps should be taken to prevent the repetition of such malicious suits in the future, by means of a bill to be presented to the legislature embodying the New York law to prevent speculative malpractice suits, the main feature of which requires that before suits for damages be begun bonds be given equal to twice the amount claimed, as damages to indemnify parties, where the suits are lost or dismissed, who have suffered in pocket or reputation.

There is urgent need of such laws in every state in the union, and it would be wise to follow the example of New York in this matter. Would-be blackmailing schemes would be nipped in the bud in the majority of instances, and the suits for malpractice would be in the main honest and legitimate, with some serious reason for action.

As the case stands now, almost anybody may bring a suit for damages against a physician without fear of the consequences, no matter what the circumstances may be. In all such cases it is always the physician who suffers, be he in the right or in the wrong, though he may not be injured in the pocket directly, his general reputation and standing in the community receives a smirch through the profuse amount of advertising which the newspapers, as a rule, liberally bestow upon such cases, and through the unpleasant notoriety and comments which this engenders; so that even if he be not mulcted in court his practice is sure to receive a set-back.

It is proper that the profession should recognize these facts,and should attempt to obey more strictly the first law of nature, in addition to acknowledging its abstract justice.

PREVENTABLE BLINDNESS.

According to a paper read by Dr. Lucien Howe before the Boston Society for Medical Observation, blindness in the United States is increasing at a rate out of proportion to that of the growth of the population. The population of the United States increased 30.09% between 1870 and 1880, while the number of blind increased 140.78%. In 1880 the community is supposed to have been at a charge of between $16,000,000 and $17,000,000 for the support of these individuals. The reasons for this disproportionate increase are not at hand. Certainly the knowledge of diseases of the eye

has been constantly increasing, and improved methods of treatment based on that knowledge have been coming into use all the while, and the question is one susceptible of a great deal of explanation. It is possible that part of the discrepancy may be ascribed to the influx of immigrants from foreign countries, as well as to the flourishing condition of quackery in the period mentioned, but whether or not these act as factors it is at present impossible to state.

To go into the question more closely, we may look at the figures furnished in the *Bost. Med. and Surg. Jour.* by Hasket Derby, M.D., in a paper on some of the causes of preventable blindness. He examined 183 cases of blindness at the Perkins Institution for the Blind, in Boston, and found 34, or 18%, dependent on blenorrhœa neonatorum. This is a smaller proportion than those obtained by other observers, due to the limited number of individuals examined.

At the Sheffield School for the Blind, Mr. Snell found 38.3% blind from this cause, but the general estimate by observers is about 30%. Four cases out of the 183 resulted from trachoma, and 12 from the results of sympathetic ophthalmia, or 50 in all, making 27% due to preventable causes.

We cannot agree with Dr. Derby that the sight of the whole 27% might have been saved, for that would be going to extremes, but that a large proportion of the 27% might, with proper care and treatment, have had their eyesight preserved, cannot be doubted. When the full significance of these figures is once appreciated, when the fact is realized that at the very lowest estimate, one blind person out of every six need not necessarily have ever become so, laying aside entirely the question of the burden upon the community, then prophylactic treatment will assume greater importance and attract more general attention.

It is an established fact that the ophthalmia of newborn children can, with few exceptions, be successfully prevented when there is reason to apprehend its occurrence. As soon as the child is washed, one or two drops of a 2% solution of silver nitrate may be dropped into each eye. This gives the surest results, is devoid of danger, causes but trifling irritation, and is deserving of general use.

Trachoma is a less important cause of blindness, and does not deserve so much consideration. It is said to be on the decrease.

The other factor as a cause of preventable blindness, traumatic sympathetic ophthalmia, remains to be considered.

Of Dr. Derby's 183 cases, 12, or 6%, were due to this cause. As blindness from this source may be guarded against by the timely removal of the injured eye, he believes that the indications for this operation should be familiar to the profession and considers the most plain and practical rules as follows:

The injured eye should be removed when:

(*a*) It contains a foreign body that cannot be extracted without destroying the eye.

(*b*) The nature of the injury is such that sight is unlikely to return, and there is danger of sympathetic disturbance.

(*c*) There is tenderness on pressure, vision having been destroyed.

Are Professional Services Obligatory?

The Paris correspondent of the *Lancet* reports a dispute of considerable interest to the medical profession, which has arisen between the medical practitioners of Rodez, France, and the local authorities, in which the former, acting, as they thought, on their right, declined giving their services to the authorities of the place in a certain emergency. For this the procureur-general of Montpellier sought to incriminate them under a certain section of the Penal Code, and issued summonses against them to appear to the charge at the local court. The medical men were ably defended, and maintained that, being private and therefore perfectly free practitioners of their profession, they could give or decline to give their professional services, as they saw fit.

The judgment will probably surprise not a few who practise medicine, to learn that the gist of it is that in France they are bound to give in good faith their professional services when solicited by those who represent the law. The magistrate ruled that they were guilty of violating the article in the code under the phrase *flagrant delit*, which occurs in it, and fined them six francs individually, and collectively the costs of the suit. The medical practitioners will carry the matter to the Court of Cassation, which is nearly equivalent to our Court of Appeals.

On this point the law is defective and unjust, here as elsewhere. When a physician is called to testify before a court of law as an expert, he is forced to respond under ordinary circumstances, but as to the physician receiving a proper remuneration for his time and services, it is largely a matter of chance. Should an occasion arise in which his professional services are needed, it would doubtless prove a matter of but little difficulty to the astute legal mind with the proper talent for trickery to force him (always legally, of course, and in order) to give the required assistance; but should the physician perhaps inquire about receiving a fair equivalent for his services he would probably be requested to "read the answer in the stars," or to that effect.

Cholecystotomy.

In the *Edinburgh Medical Journal* for October, is an article by Lawson Tait discussing the surgery of the gall-bladder, with statistics of his own cases. Tait believes in the conclusions which Dr. Marion Sims drew from his first case of cholecystotomy in 1878, and states that he is the first to follow out the plan successfully: "In dropsy of the gall-bladder, in

hydatid humors of the liver and gall-stones, we should not wait till the patient's strength is exhausted, nor till the blood becomes bile-poisoned, producing hæmorrhages, but we should make an early exploratory incision, ascertain the true nature of the disease and then carry out the surgical treatment that the necesities of the case may demand."

He has performed the operation of cholecystotomy 55 times with 52 recoveries. One old woman died of suffocative catarrh some weeks after the wound was healed, and two others died of cancer of the liver, which had produced distention of the gall-bladder in one case, for no gall stones were found; in the other he had opened up a suppurating gall-bladder and removed a large quantity of gall-stones. He believes that the operation as first performed by Sims is the practically perfect one, that is to say, the operation of opening the gall-bladder, removing obstructions, etc., and then sewing it to the upper end of the abdominal wound, thus leaving a fistula which is left to close of itself.

The "ideal" operation of sewing up the gall-bladder and abdominal wound separately, expecting union by first intention, as proposed by Spencer Wells. he believes to be based on altogether fallacious principles, and unsuccessful in practice. In one case so treated, a post-mortem revealed a large quantity of bile in the perineum, "not a condition" as he sarcastically remarks, "which we might expect would be contributory to success." It is a matter of extreme difficulty, in fact, to him one of absolute impossibility, to be certain during the operation of cholecystotomy that all the stones are removed from the duct. The fluid which distends the gall-bladder in cases of impacted calculus is secreted from its mucous surfaces, and if the duct be obstructed by a calculus at the time of operation the wound at the base of the gall bladder would be speedily torn open. The character of the fluid passing into the peritoneal cavity in such a case would depend upon the situation of the calculus; if in the cystic duct, clear mucus; if in the common duct, mucus mixed with bile. The same argument applies, with still greater force, against Langenbuch's proposal to remove the gall-bladder; this proposal he regards as intrinsically absurd, since to his belief, contrary to the general supposition "the nuclei of gall-stones are certainly formed in the streams of bile as they flow through the substance of the liver," as small groups of cholesterine crystals.

He believes the one argument against cholecystotomy, that a permanent biliary fistula may result, applies with much greater force against the removal of the gall-bladder and the so-called operation of cholecystectomy, since the persistence of the fistula is probably due to a calculus in the duct left after the operation. In three or four such cases he succeeded in crushing the obstructing gall-stone, located in the common duct. Another procedure in such a case is to make an artificial junction between the gall-bladder and an adjacent coil of intestine, as successfully done by Mayo Robson, of Leeds.

Tait's reasoning is correct in the main, but his language implies that he believes the nuclei of all gall-stones are formed in the liver and none in the gall-bladder, a belief which is certainly extreme and erroneous.

MEDICAL ITEMS.

Death from Starvation.—There were 21 deaths from starvation in London last year.

Monobromide of Gold.—We notice in *Merck's Bulletin*, that Goubert recommends monobromide of gold as one of the best bromides in epilepsy; dose $^1/_8$ to $^1/_6$ grain. It is also useful in hemicrania and strumous ophthalmia.

Cocaine Tablets.—Manufacturers now prepare cocaine in tablets which enable the physician to prepare his solutions of any desired strength *extempore*. Are we reverting to the olden times, when each man was his own pharmacist? It is to be hoped we are, if the counter-prescribing habit, and the patent medicine habit increase much more.

Confectioner's Disease.—A peculiar disease of the fingers and nails has been recently reported, a combination of onychia with paronychia, which occurred in a confectioner.

It was caused by working in syrups and crystalized fruits. Antiseptic treatment and a change of occupation effected a cure.

Double Polydactylism, Double Harelip, Complete Cleft Palate, and Double Talipes Varus.—A dime-museum case of this sort is reported in the *Lancet* by Mr. Marsh. The extra digits, says the reporter, are due to developmental excess; the harelip and cleft palate, to developmental arrest; and the talipes varus, to fœtal malposition or mechanical pressure in utero.

Father Damien.—It is stated on the authority of the *Brit. Med. Jour.* that the immediate cause of Father Damien's death was an attack of pernicious malarial fever which his constitution, undermined by leprosy, was unable to resist and for which he could not be induced to take any remedy. Father Gregory, one of his fellow-workers, died at the hospital of Kakaako last January, a confirmed leper.

Science Demands its Dues.—A man was recently brought to the Vienna General Hospital suffering with glanders. Dr. Hoffman, a young physician of Vienna, examined some of the pus for bacilli, and made cultures of them, with which he successfully inoculated some animals, but while doing this he accidentally inoculated himself with the disease, the first symptoms of which appeared about the beginning of October; he succumbed after several weeks of intense suffering.

Sense of Taste in Criminals.—Dr. F. Ottolenghi says that in criminals the sense of taste is manifestly weak relatively to that of ordinary individuals; there is again, a difference between occasional delinquents and those who are habitual or born delinquents. Female criminals have the sense of taste still more obtuse than men of the same category. He believes these variations due to defects in the cerebral cortex.

The Galvano Cautery in Nasal Hypertrophies.—Dr. Eric Sattler, in the Cincinnati *Lancet-Clinic*, lays stress upon the careful use of the galvano-cautery in treating nasal hypertrophies. A good speculum should always be used to protect the neighboring parts and facilitate operations; only a small portion should be cauterized at one time. He relates a case in which these precautions were neglected and almost complete nasal stenosis resulted.

Excision of Both Hip-Joints: Recovery.—Mr. Wm. Henry Battle reports in the *Lancet* for October 12, an interesting case in a boy æt. 14 years, who was admitted into St. Thomas' Hospital, suffering from acute suppurative coxitis of both sides. May 27, 1887, the head of the left femur was excised; and June 7, the right hip was treated in a like manner. Recovery followed, and the boy is now able to walk well, and without artificial support.

The Chicago Medical Library Association, incorporated last month for the purpose of securing and maintaining a library for the advancement of the medical and kindred sciences, held its first regular meeting October 14, at the Grand Pacific, at which the following were elected officers: President, Dr. N. S. Davis; Vice-President, Dr. Edward A. Lee; Secretary, Dr. Bayard Holmes; Treasurer, Dr. E. Ingals. Dr. William F. Smith was made a Director in place of Dr. Mary H. Thompson.

A Typographical Error.—Talking of typographical errors, the Burlington, Vt., *Free Press* does not remember seeing a more horrible specimen of this class of blunders than one which appeared in a Massachusetts paper not long ago. At the close of an extended and highly eulogistic notice of a deceased lawyer the reporter wished to say that "the body was taken to Hull for interment, where reposed the remains of other members of the family." By mistake a letter "e" was substituted for the "u" in Hull, changing the sense of the sentence to such a degree that no ext :copies of that issue of the paper were ordered by family of the dead lawyer.—*The Journalist.*

Apropos of the Fair.—In the Incurable Ward.—Head Physician—"There, you see how quiet and contented the patients are. They're busy with their writing all day long, and never give us a bit of trouble. If it were not for Mr. Dana I really don't know what we should do here." Visitor.—"But I did not know that Mr. Dana was a philanthropist. What has he done for the asylum?" Head Physician.—"Why he gives them paper and pencils and lets them write Suggestions for the World's Fair for the *Sun*. I often think that if some of the purchasers of the paper could see how happy the poor creatures are when they see their articles in print, they wouldn't feel so sore about the space that's given to them."—*Puck.*

BOOKS AND PAMPHLETS RECEIVED.

Annual of the Universal Medical Sciences.—A yearly report of the progress of the general sanitary sciences throughout the world. Edited by Charles E. Sajous, M.D., Lecturer on Laryngology and Rhinology in Jefferson Medical College, Philadelphia, etc., and seventy associate editors. Illustrated. F. A. Davis. 1889.

A Text Book of Animal Physiology, with Introductory Chapters on General Biology and a Full Treatment of Reproduction. By Wesley Mills, M.A., M.D., L.R.C.P. (Eng.), Professor of Physiology in McGill University and the Veterinary College, Montreal. D. Appleton & Co., New York. 1889.

Chemistry: General, Medical, and Pharmaceutical. By John Attfield, F.R.S, M.A., and Ph.D., of the University of Tubingen; F.I.C.; F.C.S., etc. Lea Brothers & Co. 1889.

Wood's Medical and Surgical Monographs, Vol. IV., No. 1, October, 1889, containing:

The Influence of the Male Element Upon the Female Organism. By John Brown, M. D.

The Internal and External Temperature of the Human Body as Modified by Muscle-Kneading. By A. Symons Eccles, M.B.

The Diseases of the Breast. By Thomas Bryant, F. R.C.S.

The Value of Creasote in Fifty Cases of Disease of the Air Passages. By Wm. Perry Watson, A.M., M.D., of Jersey City, N. J. Reprinted from Virginia Medical Monthly, October, 1889.

Atropine in Enuresis. By the same. Reprinted from Archives of Pediatrics, October, 1889.

Handbook of Dermatology. By A. H. Ohmann Dumesnil, A.M., M.D., Professor of Dermatology, St. Louis College of Physicians and Surgeons; Consulting Dermatologist to the St. Louis City Hospital; Physician for Cutaneous Diseases, Alexian Brothers' Hospital, etc., Editor St. Louis Medical and Surgical Journal, 1889.

Studies in Intestinal Surgery. By Wm. B. Van Lennep, A.M., M.D., Philadelphia, Pa. Reprinted from the Hahnemannian Monthly.

Progress in Medicine. By Ford S. Dodds, M.D., Anna, Ills.

Ovarite-Salpingite-Adherences. Maladies des Annexes, Lymphangite, Pathogenie, Traitement; Operations pour Adherences, Ablation Unilaterale et Bilaterale des Annexes. Par le Dr. Just Lucas-Championniere, Chirurgien de l'Hopital St. Louis. A. Coccoz, Paris, 1889.

The Education of Girls From a Medical Standpoint. E. W. Jenks, M.D., LL.D., Vice-President American Gynecological Society; Fellow Obstetrical Society of London; Corresponding Member Boston Gynecological Society; Ex-president Detroit Gynecological Society, etc.

Reprint from Transactions of Michigan State Medical Society, 1889.

Transactions of the Medical and Chirurgical Faculty of the State of Maryland. Ninety-first Annual Session, held at Baltimore in April, 1889.

Proceedings and Addresses at a Sanitary Convention held at Otsego, Mich., May 2 and 3, 1889, containing the following papers: President's Address, by Hon. James S. Ballou. Ventilation, by Hon. John Avery, M. D. The Hygiene of Schools, by G. A. Osinga. The Causes and Prevention of Consumption, by H. L. Miller, M.D. Nuisances; What They are and How to Abate Them, by A. Arnold Clark. Restriction and Prevention of Communicable Diseases from the Standpoint of the Local Health Officer, by L. E. Clark, M.D. The Duties and Compensation of the Local Health Officer, by Henry B. Baker, M.D.

Proceedings and Addresses at a Sanitary Convention, held at Tecumseh, Mich., June 6 and 7, 1889, containing the following papers: Duty of Preventing Disease, by L. Barnes, M.D. The Interest of the State in the Health of the Citizen, by Hon. Cyrus G. Luce, Governor of Michigan. The Public Press and the Public Health, by C. F. Field. School Hygiene, by Prof. Eugene A. Wilson. The Relation of Cesspools and Privies to Wells, by C. M. Woodward, M.D. Germ Diseases, by J. F. Jenkins, M.D. Disposal of Waste and Excreta, by O. Q. Jones, M.D. The Relation of Climatic Conditions to Disease, by L. G. North, M.D. The Restriction and Prevention of Dangerous Communicable Diseases from the Standpoint of the Local Board of Health, by W. A. Frost, M.D.; the same, from the standpoint of the clergyman, by Rev. F. Adkins; the same, from the standpoint of the citizen, by Daniel T. Hall; the same, from the standpoint of the State Board of Health, by Henry B. Baker, M.D.

LITERARY NOTES.

The *Home-Maker*, for November contains several interesting Thanksgiving stories. Among its contributors we notice the names of Harriet Prescott Spofford, May Riley Smith, Marion Harland, Eleanor W. F. Bates, M. S. Murdock, Estelle Thomson, Irene Putnam, Virginia Franklin.

SOCIETY PROCEEDINGS.

OBSTETRICAL SOCIETY OF PHILADELPHIA, THURSDAY, OCTOBER 3, 1889.

Report of a Case of Tubal Pregnancy, With Specimen—Probable Diagnosis, and Removal Prior to Rupture.

BY THEOPHILUS PARVIN, M. D.

Mrs. Mary E. W——was brought to the hospital of Jefferson Medical College, September 19, suffering from a probable ectopic gestation. She is 26 years old, been married seven years, and has had three living children, all of whom she has nursed, and during each lactation menstruation has regularly occurred; her youngest child is 13 months old, and she is now nursing it. About the 28th of June the usual flow began, but has continued ever since, with brief intermission, under the medicines given by her physician, Dr. Horrowitz. In the latter part of August and in September, she has suffered somewhat from nausea; and this with some other things, would have led her to believe she was pregnant, had not the hæmorrhage from the uterus been so constant. About the 1st of September she began to suffer with occasional violent attacks of pain low down in the left side followed by much soreness; these attacks were especially liable to occur when she lifted her child.

Because of the temporary absence of Dr. Horrowitz from the city, she went some three or four times to the dispensary of the Pennsylvania Hospital, where she was examined by Drs. Baldy and Bradford, who found a tumor on the left side of the uterus, tender and cystic, with a history of almost continuous bleeding for some weeks, there being, however, no signs of any shreds; pain in the lower part of the abdomen; only very meagre symptoms of pregnancy. A probable ectopic gestation was diagnosed, and operation urged.

The day that she came to Jefferson Hospital, she had with the hæmorrhage a discharge of small, membranous fragments; whether decidual or not, of course could only be certainly known by microscopic examination. A day or two before some similar fragments were discharged, according to her statement.

Upon examination, I found a tumor adjacent to the uterus upon the left side, the uterus somewhat enlarged and very great sensitiveness to pressure, both in the vagina and in the lower part of the abdomen, especially at the left side.

The history, the examination, and the previous examination of Dr. Baldy, with his conclusion, gave me little doubt that the case was one of tubal pregnancy.

Abdominal section was done on the 20th of September, Dr. Baldy kindly being present, and Dr. W. E. Ashton assisting in the operation. The gestation cyst included in the tube was removed, and the specimen is now shown you.

The patient's convalescence has thus far been unin-

terrupted, almost two weeks having elapsed since the operation.

Report of a Case of Tubal Pregnancy, With Specimen.—Non-Diagnosis, but Removal Prior to Rupture—Recovery.

BY J. M. BALDY, M. D.

Mrs. G. R——(colored) walked into the out-patient clinic of the Howard Hospital, July 5, suffering from pain in her abdomen, so similar to that which I have often seen go with pyosalpinx, that I diagnosed this disease before examining her. The examination revealed a large, apparently tortuous mass, posterior and slightly to the left side, giving a boggy feel to the touch. The diagnosis was verified, a saline purge given, and an immediate operation advised.

One week later, a messenger summoned me to the home of the patient, where I found her lying on the bed suffering from severe pain in the abdomen. She stated that the night before a fit of sneezing had given her a similar pain. She arose from the bed and walked to the table, a distance of about six feet. While standing there she was seized with a severe, cramp-like pain, which doubled her up, and lasted for a few moments. The idea took possession of me that she possibly was suffering from an ectopic gestation. I helped her on to the bed, and made a most careful examination, which revealed the following: she had been having children at regular intervals of about two years. She had a child just a year and a half before, since which time her menstruation had been pretty regular. With the exception of an occasional "pain in her belly," she had always been well. Before coming to me she had been bleeding regularly for about two weeks. The show was and had been clear blood, without any signs of shreds. Her husband had been away from home for about three weeks. The pain in the abdomen had been there since the bleeding began. There was not the slightest sign of pregnancy either subjective, or objective, nor did she think she was pregnant. A re-examination of the pelvis showed only what had before been found; viz., a cystic mass, which did not pulsate, posterior and to the left; apparently a distended tube. The uterus was in position of normal anteflexion, and there was a perfectly normal cervix for a multipara. There was an elevation of temperature, and the woman had had chills and creeps. I asked Dr. Hamill to see the patient for me, and he verified my examination throughout. Together we decided that it was a case of pyosalpinx, stating, at the same time, that we had thought of ectopic gestation as a possibility, but were wholly unable to find sufficient data on which to verify our suspicion.

On July 13 I opened the abdomen, with the assistance of Drs. Hamill and Naylor, and the presence of three or four other gentlemen, and removed a left tubal pregnancy, which I here present to you. As I tore away the adhesion which bound the mass to the pelvic walls, the cyst was ruptured and a teaspoonful of black clots was discharged from the sac itself. It was evidently a pregnancy of the fimbriated end of the tube, which had become adherent to the pelvic wall, the pelvic wall thus forming one side of the sac. The case well illustrates the difficulty, nay impossibility, of at times diagnosing ectopic gestation. In three weeks the patient was sent home and is to-day in her usual good health.

I would emphasize the following points, viz:

The case is one of primary or unruptured tubal pregnancy. (There are now four such cases on record from this city alone; viz., Dr. J. Price's, Dr. Goodell's, Dr. Parvin's, and my own.)

The patient is a colored woman which is rather rare.

The patient did not have a long period of sterility, but was bearing children regularly.

There was at no time a sign of a decidual discharge. There was at no time the slightest subjective or objective sign of pregnancy.

Dr. E. W. Cushing, Boston.—The subject of extra-uterine pregnancy is one of great interest to me, and I can say, from sad experience, that it is not easy to make a diagnosis. After some obscure symptoms of irregularity of menstruation, etc., a near relative was taken suddenly with a severe attack, which, after the event, I felt was due to a tubal pregnancy ruptured into the broad ligament; she finally recovered without operation. This turned my attention to the subject, and I looked up the specimens in the Harvard Medical School, which Dr. Parker photographed, and I published. In another case, of which I saw the specimen, a gentleman operated for an ill-defined tumor. The cyst was opened after the operation, and a fœtus three-fourths of an inch in length found. There had not been a suspicion of pregnancy.

I belive that almost every one agrees in regard to the difficulties of diagnosis, and I believe that pretty much every one here agrees as to the necessity for surgical treatment; yet as a subject for debate here, I would suggest in opening this discussion that there may be cases where a man may suspect extra-uterine pregnancy, but yet be not sufficiently certain to operate, or not be able to get permission to do so, or he may be unable to do an abdominal operation himself, or secure the services of one that can. I would suggest that under such circumstances the use of the faradic current is not only justifiable but prudent. This would be proper only in the earliest stages, before the fœtus has reached such development that it would leave behind a source of irritation and suppuration. I think that the condemnation of the electric treatment in the early stage has been too sweeping and severe. Certainly the horrible cases which are recorded from attempting to puncture the fœtal sac, especially at a later date, are not likely to be repeated.

Dr. William Goodell.—In regard to the electric treatment of extra-uterine fœtation, I must confess that I was theoretically inclined to believe in it. But when I had met with cases of extra-uterine fœtation, and I saw the mass that was present, and the adhesions and injuries which adjacent organs had sustained, I could

no longer uphold it. In my opinion electricity should be reserved for those cases in which the woman absolutely refuses any surgical operation, or when the physician is not a laparotomist, and he cannot secure the services of one. The amount of adhesion is, however, so great, and the injury done the appendages so severe, that the woman cannot in any case conceive on that side. This was apparent in the case reported by me to the society in which I operated previous to the rupture. In this case, indeed, the appendages of the unimplicated side were so diseased as to need removal. The opera- is therefore warranted, if, for no other reason, simply for the diseased tubes and ovaries. I have practically been converted to the belief that electricity, and particularly electrolysis, should not be used in these cases. The electrolytic action is a most dangerous one. Although advocated by Apostoli, the results have been most disastrous in the cases in which it has been tried.

Fifteen years ago, in a case which I now believe was one of extra-uterine pregnancy, I punctured the tumor with an aspirating needle. In a few days septicæmia set in, and the woman died.

The injection of morphia, as recommended by Winckle and by others, has met with better success. But while it destroys fœtal life, it cannot cure the injuries sustained by the appendages, for which the best remedy is the knife.

I have had four cases of early extra-uterine pregnancy within a few months, all of which were successful. One I supposed to be a simple case of disease of the appendages, and operated accordingly. It had burst, and without marked symptoms. In another case of ruptured sac the specimen was perfectly analogous to that presented by Dr. Baldy, and he was present at the operation. The history of the third case I have already given to the Society, and I presented the specimen. I diagnosticated the ectopic pregnancy and operated before rupture. The fourth case was one of interstitial pregnancy,on which I operated the day before I went to Europe. The woman was brought to me by her physician, with the history of hæmorrhages and great suffering, but with none of pregnancy. Her physician thought that the tumor was either a fibroid or a polypus. I found a fluid tumor bulging into the endometrium, and slightly dilating the os uteri. My diagnosis was a necrotic intra-mural fibroid tumor. Using Adam's subcutaneous saw, I cut into the mass, and removed a quantity of grumous blood and broken down fragments. These latter were examined under the microscope and found to be placental tissue. The subject of extra-uterine fœtation is of great interest, not only before and after rupture, but also in relation to the cases that go on to term. I shall never forget the first case of extra-uterine fœtation that I saw. It was the classical case of the late Dr. Parry—the one which led him to write his admirable essay on the subject.

A distinguished surgeon was called in. This was in the days when we made marked distinction between pelvic cellulitis and pelvic peritonitis. He diagnosticated the case as one of pelvic cellulitis. There was heat and great pain, with complete immobility of the womb. The patient did not improve, and I was called in, and diagnosticated the case as as one of pelvic peritonitis, which in one sense it was, as the subsequent history will reveal. My treatment was not satisfactory, and I lost sight of the case. Several weeks afterwards, while I was confined to my house for a few days by an illness, Dr. Parry came to see me. He sat down by my side, and after asking about my health, he referred to this case, and pointing his long finger at me said "you have made a great blunder." He then told me that he had been called in the day before to see the case, and that he considered the case one of normal pregnancy, for he had heard the heart sounds with the utmost ease; in fact, had never heard them so distinctly before. I said to him, "Dr. Perry, of course you are right in the theory of pregnancy; but depend upon it, there is something wrong, for I can hardly think that Dr. ——— or myself could have made such a mistake without some good reason for it." The time for labor came, but it did not set in. Then the death of the child occurred. Dr. Parry was now again sent for, but this time he was unable to find the os uteri, so he sent for me. With great difficulty I found the cervix above the pubic bone. We then made the diagnosis of retroverted gravid uterus. At the next visit, it intuitively flashed across my mind that it was a case of extra-uterine fœtation, and then the case was clear enough. To clinch the diagnosis, Dr. Parry introduced a hypodermic syringe needle and drew out some amnioted fluid. In a few days the head bulged down into the vagina and we could distinguish even the sutures. We wished to incise the vagina and deliver the child with forceps; but the woman refused an operation and died. At an autopsy, Dr. Parry withdrew the sac and fœtus and exhibited them to this Society. Not long after this I saw a second case. The woman had passed full term, the child had died, and yet labor did not come on. Her physician, much puzzled, called me in. In this case the cervical canal was open, and suspecting extra uterine pregnancy, I passed my finger into the uterine cavity and found it empty. The case was seen by one or two other physicians in consultation with us. We were anxious to operate, but the husband would not permit it, unless we could assure him positively that his wife would recover. While waiting the woman suddenly died.

The third case I saw a number of years ago in a mulatto. The child was living at the time that I operated. There was no difficulty, either in the diagnosis or in the operation. The child, being hardly viable, gasped a few times and died. I did not dare to remove the placenta, and as the umbilical cord was very large, I made the mistake of leaving it in the lower angle of the wound as a drainage-tube. The woman died a few days later, and at the autopsy we found the liver and lungs riddled with pyæmic abscesses.

I operated on another case in which the fœtus must have died at the age of six months. The woman was perishing from blood-poisoning. She was emaciated,

had high temperature and night sweats. Pus was evidently present somewhere, and I diagnosticated the tumor as a suppurating ovarian cyst. What perplexed me was great resonance in front. At the operation this was explained by the presence of the gases of decomposition. Excessively fœtid pus escaped. I removed the fœtus, the bones of which, with the scalp and umbilical cord, were the only parts intact. The placenta was not to be found. The woman died suddenly from supposed heart clot, after a violent altercation with her husband.

Not long after I was called to Mount Holly to see a case which had been correctly diagnosticated by the physician. I removed a petrified seven-months' child. The patient had albuminuria, but did well until the eleventh day, whon uræmic convulsions set in, and she died comatose. All these operations were performed before the days of antiseptic surgery, and I have not since seen a case of advanced ectopic gestation.

I believe that Tait is correct in explaining these advanced cases by the rupture of the tube and the escape of the unbroken gestation sac into the fold of the broad ligament. The behavior subsequently is precisely like that of an intraligamentary ovarian cyst.

In regard to early diagnosis, I should say that the most common symptom is arrest of menstruation for one or two periods, followed by irregular uterine hæmorrhages. It is true that pelvic colic is a common symptom, but not so common as the other. But I do not know that it is necessary to make an absolute diagnosis; given a woman with the exacting symptoms of a suspected extra-uterine fœtation, who has a displacing tumor on one side of the womb, are we warranted in operating merely to remove the tumor, whatever its nature? Do we not constantly, on less provocation, remove pelvic tumors whose character is determined only by the operation? Instead of an extra-uterine fœtation, we may find pyosalpinx, or an ovarian abscess; but were we not in duty bound to perform the operation, even at the risk of an error in diagnosis?

Dr. Barton C. Hirst.—I was some time ago called to a case in consultation which presented a clear history of extra-uterine fœtation; cessation of two periods, hæmorrhage with the discharge of deciduous membrane, a distinct tumor to one side of the uterus, and the subjective signs of pregnancy, with swelling of the breasts and vomiting. Dr. Hamill and myself urged operation, but the family being dissatisfied, we were discharged. Another physician was called, and Dr. Parrish was consulted. He recommended the use of electricity, and a current was applied with relief of the symptoms, and, I believe, complete cure of the patient. There may be a varicose vein in the broad ligament which having burst may present all the signs of extra-uterine fætation after rupture of the sac. I have had two such cases; in one case I opened the abdomen and found a blood-tumor in the layers of the broad ligament and considerable blood in the peritoneal cavity. From the history and physical signs, I am quite sure that this was not an extra-uterine pregnancy.

I saw, in consultation, a fatal case of this kind after labor not long ago. The labor was a difficult one and ended by craniotomy. There was rupture of a vein in the broad ligament. The bleeding was first between the layers of the broad ligament. This then ruptured into the peritoneal cavity and the woman died. There was no rent in the uterine wall. Such cases might be mistaken for extra-uterine fœtation.

Dr. M. Price.—In most of these cases, all that we can make out is that there is something which should be removed; but as to a distinct diagnosis of extra-uterine pregnancy being made, I do not believe that it is done one time in ten. Dr. Parvin, in his case, would not have been surprised to have found distention of the tube from any cause. In a case which presented all the symptoms of uterine pregnancy, and where I expected to find this condition, I found a pair of large pus-tubes. I have seen twenty or twenty-five cases of extra uterine pregnancy, nearly all of them ruptured tubal pregnancies. It does not interest us a particle whether the cases were diagnosed or not. There is trouble present of such a serious character that it does not become us to lose a single moment. Most of these cases come into the coroner's and not the surgeon's hands. Delay in operating is adding 10% to our mortality. It is our duty to operate on the first indication, and if we are mistaken, to thank God for the absence of so serious a condition.

Dr. Joseph Hoffmann.—I have twice operated for extra-uterine pregnancy and did not find it. I operated once for something else and found extra uterine pregnancy. The first case presented the signs of extra-uterine pregnancy to even a more marked degree than that of Dr. Hirst, coming on after a sterility of eight years, a retroverted mass, flooding and violent pain. At the operation I found two pus-tubes. She was pregnant and miscarrying and completed it after the operation. The second case was almost on a par with this. In the third case I operated for pus tube and found extra-uterine pregnancy. The trouble is, that these men who claim positive diagnosis do it from a single case, which, though by no means certain at the time of operation, resolves itself into an absolute diagnosis when they come to publish it. It is the dreams and the nightmare of desire to publish something startling, which make the diagnosis. There are such a variety of conditions in the pelvis giving rise to these symptoms that it is impossible to say absolutely what we have. I have gone over Dr. Thomas' list of cases and found that, so far as absolutely correct early diagnosis is concerned, it is worth nothing. In only one case, if my memory serves me, was there a post-mortem. In three or four in which death occurred there was no post mortem; and in the others, where the current was used, the diagnosis in most of them was made after symptoms of rupture.

The treatment by the electric current is advocated by Reeves, who strangely falls into a fallacious argument. He says that if we use electricity in cases where there are symptoms of extra-uterine pregnancy, and these

symptoms disappear after the use of the current, why not call them extra-uterine, as we do in other diseases, and illustrates the argument by the use of mercury in syphilis. If the effect of electricity was as well estab lished as that of mercury in syphilis, the argument would be more logical. When we feel that rupture has occurred, electricity is a dangerous thing to tamper with. The principal danger is in delay. The longer the growth is allowed to continue, the greater the danger from adhesion, rupture and complications which cannot be foreseen.

Dr. J. Price.—There are some interesting facts in connection with the history of this subject. It is curious that a few years ago a man with an experience of one doubtful case should discuss the subject before the American Gynæcological Society. It is also curious that the same man, with a single experience with a woman sterile five years, having pelvic pain, irregular menstruation, a delayed period of six days, and recurring attacks of pain, should claim to have killed the fœtus of an extra-uterine pregnancy by the use of electricity for ten seances of half an hour's duration each, on consecutive days. Then follows another man with an experience of one case, and another in consultation. The man with an experience of one case used electricity, and the case passes into the hands of another, who writes to the first that he he going to operate. The first physician at once writes not to do it,as he has killed the fœtus; while the operator already holds in his hands a large hydrosalpinx.

Dr. Baldy, in a recent paper in the *N. Y. Med. Rec.*, lays down certain propositions, and makes the diagnosis easy in many cases. He has forgotten that many of these patients die as if with a ruptured aneurism before the woman suspects that anything is wrong. These cases go to the coroner. In the cases that reach the surgeon the hæmorrhage has not been so great

It is interesting to refer, in this connection, to the cases of Dr. Edis and Dr. Bantock. Dr. Edis found on one side an extra uterine pregnancy, and on the other a small ovarian cyst. Dr. Bantock found on one side an extra-uterine pregnancy, and a pus-tube on the other. I have here an enormous tubal pregnancy, with rupture at the pavillion, and the abdomen filled with blood. On the other side was a beautiful hydrosalpinx.

One of the prominent cases on record I saw a few hours before the operation. We regard that there was a doubtful history of extra-uterine pregnancy, but no prominence was placed upon this point. It might have been a small ovarian or dermoid cyst, or a large hydrosalpinx. When the abdomen was opened, every one expressed great surprise at the presence of tubal gestation. The same case has flourished over the world as a case of positive diagnosis. This is the case in which letters were written inviting different men to the operation; but the letters were written after the operation. This case will not bear close scrutiny. If we look over the transactions of the American Gynæcological Society,we shall find that the men who have had the least experience speak most positively.

Dr. Noble.—Monday, a week ago, I removed an extra-uterine pregnancy which was rather unusual in the condition present. In my case the woman had skipped the period in August. There was nausea and other symptoms of pregnancy. In September, a week before the sickness should have occurred, she began to flow freely; then had cramps and fainted in the street, and afterward had fainting attacks. I saw her two weeks after the beginning of the flow. At one time, while in the water-closet, she passed what she thought to be a large clot. The opinion of her physician was that she had had a miscarriage.

I found a mass on the left side pushing the womb to the right. I recommended operation, which was not consented to for some days. In the meantime, the hæmorrhage continued. The patient was seen by Dr. Kelly, and we agreed that it was almost certainly an extra-uterine pregnancy. At the operation I found the blood in the peritoneal cavity. The blood was almost entirely clotted. The ovum was attached not far from the uterus. The hæmorrhage had taken place in the tube, and the clots had been found forced out through the fimbiated extremity. On the other side there was a hydrosalpinx. She had also had the rectal tenesmus. She has done well since the operation.

Dr. B. F. Baer.—I wish to go on record as one who believes that it is as easy to diagnose extra-uterine pregnancy as to diagnose any other condition within the abdomen (as hydrosalpinx or pyosalpinx) positively. But the man who says he can make such a diagnosis positively, is an unsafe man. Dr. Taylor assisted me some five years ago in a case of extra-uterine pregnancy in which the diagnosis was made. The fœtus had advanced to the age of two and a half months, and the symptoms which have been mentioned were present. There was enlargement of the uterus, and I heard the placental bruit. I felt fluctuation in the sac, and was almost certain that I detected ballotment. I, however, operated in an unsientific way, cutting through the vagina. I got the embryo, but the patient died.

Dr. M. Price.—Did I understand Dr. Baer to say that he heard the placental bruit at two and a half months?

Dr. J .M. Baldy.—How did Dr. Baer detect ballotment at this early stage?

Dr. Baer.—I have heard this murmur in normal pregnancy at two and a half months. I believe that it is not yet clearly understood whether the murmur is placental or simply a uterine murmur. It is, however, due to pregnancy.

In regard to ballotmnnt, given a sac filled with liquor amnii and an embryo dangling in it, I think that ballotment could be readily detected.

Dr. William Goodell.—Dr. Baer is right in regard to early ballotment. This is said to be detected much earlier in extra-uterine fœtation than in natural pregnancy.

Dr. J. M. Baldy.—I know there are cases on record, but I doubt the occurrence of ballotment in these. It

could not possibly have occurred in such specimens as that presented to-night. And so it has been with all the cases I haue seen. Reference has been made several times to a paper of mine in the *New York Medical Record*, in which I lay down three propositions. The first is, that in a certain proportion of cases of extra-uterine pregnancy in the early stages, the diagnosis is easy and unmistakable. The second, that in a certain (quite large) proportion of cases, sufficient symptoms are present to more than warrant a diagnosis of extra-uterine pregnancy, such a pregnancy not being present. The third, that in a certain other proportion of cases the symptoms, until rupture has occurred, are entirely wanting or are of such a dubious character as to in no wise warrant such a diagnosis. These propositions have been abundantly sustained by the cases reported to night. Cases have been reported in which the diagnosis was made and the condition found, and there are enough of these cases on record to show that the diagnosis can be made at times. Then we come to the second group of cases, in which the diagnosis is justified by the symptoms, but something else is found. This I sustained by cases of my own, and it has been more than abundantly substantiated by cases reported to night by Dr. Goodell, Dr. Hirst, Dr. J. Price, Dr. M. Price, and Dr. Hoffman. Dr. Johnston, of Washington, has reported a similar case. The third proposition is also sustained by cases reported to-night (in addition to my own) by Dr. Hoffman, Dr. J. Price, and others. If there are well-substantiated cases in which the diagnosis was not made and extra-uterine pregnancy found, and, again, if we operate for extra-uterine pregnancy, the symptoms justifying such a diagnosis, and something else is found, I cannot see how any sensible man can claim that it is possible to make a positive diagnosis. I agree with Dr. Hoffman that Dr. Thomas' cases are utterly worthless from a diagnostic point of view; nor does Dr. Thomas himself hold that it is always possible. The men who claim that a positive diagnosis can be made have most signally failed. For instance, the case of Mann, of Buffalo, which went into the hands of Wylie, who operated and did not find ectopic gestation; the case which Buckmaster, together with other medical talent, treated with electricity, even to puncturing, I think, and finally pronounced normally pregnant; the case of Kelly, of Philadelphia, the diagnosis of which case has to-night been denied by two eye-witnesses, as well as others.

It is noteworthy that the men who claim the most on this subject, have had the least experience.

J. M. Baldy, M.D., Secretary.

328 South Seventeenth St.

Danger in Silk Thread.—Silk thread is soaked in acetate of lead to increase its weight, and persons who pass it through the mouth in threading needles, and then bite it off with the teeth, have suffered from lead poisoning.—*Sanitary News.*

SELECTIONS.

Antifebrin in the Treatment of Headaches.—About a year ago I began a study of the analgesic effects of antifebrin in the various headaches, and my treatment has been so gratifying that I wish to record it. In headaches of the nervous type, in facial and supra-orbital neuralgias—not very severe—I prescribe five grains every half-hour, and in severe cases I give ten grains, to be followed by a similar dose in three-quarters of an hour, if necessary; to be most effectual, the dose must be graduated according to the severity of the case and peculiarities of the indivdual, and when this is accomplished the administration of the drug becomes very safe and its effects exceedingly reliable. Of 500 or more cases of these affections which I have treated I have given relief to all but a few, and in most cases the entire disappearance of pain followed the administration of the remedy. But it is in the sick headaches that antifebrin seems to me to be the best of all remedies, not even excepting antipyrin, which I have used with excellent success; antipyrin will do well enough in the prodromal stage, but in the later stages may cause many gastric disturbances and provoke that distressing symptom rather than allay it; in simple migraine, antifebrin is, I think, the remedy indicated, and if given in the beginning will almost certainly abort an attack. I have treated fifty cases at least of pure migraine, and I know of no failure to ameliorate the symptoms when the drug was properly administered, and here, too, the dosage is important; in the prodromal stage of an ordinary attack, five grains every half-hour was generally sufficient—if the case was further advanced, large doses at longer intervals were better, such as ten or fifteen grains every hour for two or three doses. If there is much gastric disturbance the dose should be placed directly upon the tongue and very little liquid used in taking it; but it must be remembered that antifebrin will not so much cure an attack as abort it, hence the necessity for the early administration of the drug. I may add that I have lately used phenacetin as an analgesic, but found it in no way superior to antifebrin.

In regard to acetanilid poisoning, I have only noted it once in all my cases, and in that instance a much larger dose than prescribed was taken. From my year's work, then, and its results I conclude that antifebrin is

1. A most effectual analgesic for headache.
2. The remedy, par excellence, for sick headache.
3. And that, when used with the precautions necessary in the use of all drugs, it is absolutely without danger.—*Med. Record.*

The Dread of Death.—Sir Lyon Playfair in a letter to Junius Henry Browne, author of a paper with the above title, says: "Having represented a large medical constituency (the University of Edinburg) for seventeen years as a member of Parliament, I naturately came in contact with the most eminent medical men in England.

I have put the question to most of them, Did you, in your extensive practice, ever know a patient who was afraid to die?' With two exceptions, they answered 'No.' One of these exceptions was Sir Benjamin Brodie, who said he had seen one case. The other was Sir Robert Cristian, who had seen one case, that of a girl of bad character, who had a sudden accident. I have known three friends who were partially devoured by wild beasts under apparently hopeless circumstances of escape. The first was Livingstone, the great African traveller, who was knocked on his back by a lion, which began to munch his arms. He assured me that he felt no fear or pain, and that his only feeling was one of intense curiosity as to which part of his body the lion would take next. The next was Rustem Pasha, now Turkish Ambassador in Londen. A bear attacked him, and tore off part of his hand and part of his arm and shoulder. He also assured me that he had neither pain nor fear, but that he felt excessively angry because the bear grunted with so much satisfaction in munching him. The third case is that of Sir Edward Bradford, an Indian officer, now occupying a high position in the Indian office. He was seized in a solitary place by a tiger, which held him firmly behind the shoulders with one paw, and then deliberately devoured the whole of his arm, beginning at the hand and ending at the shoulder. He was positive that he had no sensation of fear, and thinks that he felt a little pain when the fangs went through his hand, but is certan that he felt none during the munching of his arm."—*The New Idea.*

L. W. Noyes of Chicago, the maker of Dictionary Holders, sends upon receipt of a two-cent stamp to pay postage, a series of very pretty blotters of most excellent quality. One has a cut of a little drum-major cupid at the head of two long columns of Dictionary Holders, and this is his speech: "I am a quiet little 'drummer' for the Noyes Holders. It is my mission to call attention to this fact that these are the only holders that have strong springs to hug the book firmly together, thus keeping the dust out of the upturned edges. The possession of Noyes' Dictionary Holders has made about 125,000 families happy and accurate in the use of words. Buy a Noyes Dictionary Holder from your bookseller and see how much more frequently you will refer to the dictionary."

Literary Piracy.—Our attention has been called to the most glaring example of literary theft it has ever been our misfortune to be called upon to expose. Our esteemed contemporary, *The Lancet*, in its issues of May 18th and June 22d, contains a lengthy paper on "The History and Use of Anæsthetics in Midwifery. By Frederick W. Allwright, M.D., L.R.C.S.I., which is taken bodily, in the most barefaced manner, from Dr. J. C. Reeve's chapter on "Anæsthetics in Obstetrics," in the first volume of Hirst's *American System of Obstetrics* (Philadelphia, 1888). Dr. Allwright—he would be more appropriately named Allwrong—has not added a single original sentence to the lengthy paper as it appears in *The Lancet*, although he has gone to the trouble to substitute here and there a synonym, or to invert the arrangement of words. We trust that the editor of *The Lancet*, who has been the innocent victim of this gross piracy, will give it the fullest publicity, so that, the true character of its author being exposed to public gaze in his own country, he will cease to be a source of possible discredit, through his devious methods, to the community in which he lives.—Ed. *Med. News.*

Treatment of Hæmorrhoids.—Some time since Unna strongly recommended the use of chrysarobin in hæmorrhoids. A report of twenty-two cases treated with this remedy now comes from a Russian physician, Dr. Kossobudski. True, he did not use the drug in such strong solutions as recommended by Unna (5 to 10%), yet the result was most gratifying. After washing the parts with a 2% carbolic acid, or a 1% creolin solution, and drying them with absorbent cotton, he applied, three or four times daily, a salve of the following formula:

℞	Chrysarobin,	grs. xij.
	Iodoform,	grs. v.
	Extract of belladonna,	grs. jx.
	Vaseline,	ʒjv. M.

In cases of internal hæmorrhoids he prescribed suppositories as follows:

℞	Chrysarobin,	grs. $1^1/_4$.
	Iodoform,	gr. $^1/_3$.
	Extract of belladonna,	gr. $^1/_6$.
	Cacao butter,	grs. xxx.
	Glycerine q. s. for suppository.	

If bleeding was severe, tannin was added to the above. With such therapeusis the pain and bleeding disappeared within three or four days, and the hæmorrhoids had completely shrunk away in three or four months.—*Centralbl. f. Chirurg.—Med. News.*

Reproduction of the Entire Patella After Necrosis and Removal by Operation.—Dr. Gibney reports the following interesting case: The patient was a boy who, at the time of injury to his knee by a fall, was æt. seven years. Pain and swelling followed, and eight days after the injury a physician opened an abscess at the knee in the prepatellar region. A drainage-tube was inserted, and two weeks later Dr. Gibney saw the patient. There was then much discharge of pus, the parts were infiltrated, and the patella was movable over a limited area. A few days later he explored the parts and found the patella bare. On April 5th, the patella was turned out, and the wound treated antiseptically; fixation was obtained by a plaster-of-Paris splint, and the boy kept in bed three weeks. In July the function of the knee was fully restored. The patella is now as large as that on the other side.—*Med. Record.*

A New Caustic Paste.—Dr. Jules Felix, of Brussels, has introduced a caustic paste which he holds is free from the inconveniences of caustics in general, and for which he claims the following advantages:

The pain produced by it is not intense, and very bearable. It produces a hard, well-marked eschar, which rapidly detaches itself, or is easily removed. Its action is modifying and markedly antiseptic. It is a powerful hæmostatic. It is easily handled and does not attack the hands of the operator. This caustic is neither fusible nor deliquescent and is easily and surely applied, and remains in place as long as necessary, from 6 to 24 hours, according to intensity of action desired. The eschars are easily detached in a few days by glycerine dressings.

The following is the formula for making the paste:

℞ Starch,	37	parts.
Flour,	112	"
Bichloride of mercury,	1	"
Chloride of zinc, dry	110	"
Iodol, pure,	10	"
Croton chloral,	10	"
Bromide of camphor,	10	"
Acid carbolic (crystals)	10	"

Mix in a glass mortar and add sufficient distilled water to make a homogeneous paste free from lumps and of the consistence of putty. If handled with wet hands, it may be worked as desired. It keeps perfectly.—*L'Union Med. du Can.—Va. Med. Monthly.*

The Use of Salol.—Dr. W. L. Carr, in *Arch. of Ped.* for September, says:

"The conclusions drawn after the use of salol indicate that it is an easily administered, safe drug in the first stage of acute gastro-enteritis in children, and in the more chronic forms of entero-colitis, accompanied by slimy, bad-smelling evacuations. In the acute condition it is necessary to keep the stomach at rest and administer two or three doses of salol within five or six hours. For the more chronic state of catarrh, it is best given in somewhat larger doses before meals. In frequent serous discharges and in colitis the salol does not produce the same good results as in the cases mentioned above, and its effect is uncertain, not being so rapid or so sure as an opiate.

In dysenteric disorders it cannot be relied on.

It seems, then, that salol acts best in morbid conditions due to fermentation and decomposition in the stomach and upper bowel, and that it diminishes in power as it passes through the large intestine."

Posture in the Treatment of Tympanites.—Mr. Oxley, writing to the *Lancet* concerning a case of obstinate tympanites which had resisted all drug treatment, says that instant relief was obtained by placing the patient in the knee-elbow position. He advises a trial of this before resorting to puncture of the abdomen.

What Are the Thoughts of the Dying?—In the Societe de Biologie, Fere affirmed that a dying person in his last moments thinks of the chief events of his life. Persons resuscitated from drowning, epileptics with grave attacks, persons dying and already unconscious, but momentarily brought back to consciousness by ether injections to utter their last thoughts, all acknowledge that their last thoughts revert to momentous events of their life. Such an ether injections revives once more the normal disposition of cerebral activity, already nearly extinguished, and it might be possible at this moment to learn of certain important events of the past life. Brown-Sequard mentions the remarkable fact that persons who, in consequence of grave cerebral affections, have been paralyzed for years, get back at once when dying, their sensibility, nobility and intelligence. All such facts clearly show that at the moment of dissolution, important changes take place, reacting upon the composition of the blood and the functions of the organs.—*Wien. Med. Zeitung.*

Brain Surgery.—Dr. Edmund Souchon of New Orleans, has demonstrated by experience on dogs a useful and, as it seems, a safe method of exploration of the brain for the purpose of locating pus cavities. To obviate the necessity of removing a large button of bone, as is usually done, by means of the ordinary trephine, he employs a watchmaker's drill, which makes an opening just large enough to admit a needle with a caliber about the size of an ordinary hypodermic syringe. This method permits one to make several tentative punctures with the infliction of comparatively little injury. In his experiments he made use of dogs, in which he found that four such operations of trephining and puncture, in a single animal, were unattended by noticeable effects. After the results of the first operations were obliterated the animals were kept at rest for two weeks, when the same operations were repeated, with similar results—no remote effects whatever being witnessed.—*Med. News.*

Your Billions of Ancestors.—Did you ever think how many male and female ancestors were required to bring you into the world! First it was necessary that you should have a father and mother—that makes two human beings. Each of them must have had a father and mother—that makes four more human beings. Again each of them must have had a father and mother—making eight more human beings. So on we go back to the time of Jesus Christ—56 generations. The calculation thus resulting shows that 139,235,017,489,534,976, births must have taken place in order to bring you into this world! You who read these lines. All this since the birth of Christ. Not since the beginning of time. According to Proctor, if from a single pair, for 5,000 years, each husband and wife had married at 21 years of age, and there had been no deaths, the population of

the earth would be 2,199, 915 followed by 144 ciphers. It would require to hold this population a number of worlds, the size of this, equal to 3,166,526 followed by 125 ciphers. The human mind shrinks in contemplating such immense numbers.

THE HOTTEST SPOT ON EARTH.—The hottest region on the earth is on the southwestern coast of Persia, where Persia borders the gulf of the same name. For 40 consecutive days in the months of July and August, the thermometer has been known not to fall lower than 100 degrees, night or day, and to often run up as high as 128 degrees in the afternoon. At Bahrin, in the center of the torrid part of this torrid belt, as though it were nature's intention to make the region as unbearable as possible, no water can be obtained from digging wells 100, 200 or even 500 feet deep, yet a comparatively numerous population contrive to live there, thanks to copious springs which break forth from the bottom of the gulf, more than a mile from shore.

The water from these springs is obtained by divers, who dive to the bottom and fill goat-skin bags with the cooling liquid and sell it for a living. The source of these submarine fountains is thought to be in the green hill of Osman, some 500 or 600 miles away.

COCAINE IN THE TREATMENT OF AFFECTIONS OF THE URINARY ORGANS.—M. Lavaux spoko of the advantages of the employment of injections of cocaine in cystitis accompanying sticture. The strength of the solution should not exceed four per cent., and a tablespoonful of this solution should be injected at the time in order to anæsthetize all the mucous membrane of the bladder. The injection should be made without the catheter. The injection of cocaine is also useful in certain forms of costalgia and vesical neuralgias, and in the spasm of the membranous portions of the urethra in stricture. It should be added that cocaine provokes a persistent desire to micturate frequently, and sometimes this becomes annoying to the patient.—*Med Press and Cular*

EXPLOSIVE MEDICAMENTS —Professer Robert calls attention to the following explosive mixtures: Chlorate of potash mixed with charcoal dentifrice powder may explode, even in the mouth. Chlorate of potash mixed with catechu, or with tannin, explodes with friction, even if glycerine is added. Chlorate of potash and phosphate of sodium explodes while mixing the powder. One part of chromic acid mixed with two parts of glycerine explodes immediately. Iodine and ammonium should never be mixed together, as it is extremely apt to explode. Bromine and alcohol, forming the bromide of ethyl, often explodes. Picric acid reduced to powder explodes, when mixed with any other substance.—*Gazette de Gynecologie.*

LAUDER BRUNTON ON THE SUSPENSION METHOD.—Dr. Lauder Brunton, in one of his lectures on "The Relation Between Chemical Structure and Physiological Action," refers to the remarkable benefit obtained from suspension as one of the most striking discoveries that have been made in therapeutics in recent years. He finds all explanation of it very difficult, but is inclined to think that suspension merely acts on the cord in the same way that massage does upon the muscles, by the lymph, and with it the products of nerve waste; while at the same time it may increase the processes of oxidation and repair by free circulation of the blood.

NOT IN MERCK'S BULLETIN.—The astistant examiner of Chinese customs service has sent to the Treasury Department, here a printed list of Chinese medicines exported from Yangtse ports. Among the remedies are tiger's bones, ground blood, bear's gall, asses' glue, tree bugs, elephant's gall, fossil teeth, fowls' gizzards, "insects of nine smells," Job's tears, cowhair, glass, rhinocerus horns, cow's knee, puff balls, dragon's teeth' straw, hedge-hog skins, dried silk-worms, snake skins, crabs' eyes, horse tails and centipedes.—*New York Sun.*

THE WINE AGREED WITH THEM.—Young waiter (at a medical dinner)—"Them doctors use a lot of wine, but I s'pose they kin stand it."

Old waiter—"Dunno about that; I'm thinking they're gettin' pretty tight already."

"They don't look so."

"No; but they're beginnin' to agree."—*Phil. Rec.*

TINCTURE OF IODINE A CURE FOR WARTS.—Dr. Imossi, of Gibraltar, has been treating warts with internal doses of tincture of iodine in ten case, all of which resulted favorably. The dose given was ten drops in half a glass of water, twice a day. A slight emaciation of the patient will be regained as soon as the treatment is discontinued.—*Med. News.*

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE U. S. MARINE HOSPITAL SERVICE.

ENDING OCT. 19, 1889.

Vansant, John, Surgeon, granted leave of absence for fifteen days, October 16, 1889.

Goldsborough, C. B., Surgeon, leave of absence extended thirty days on surgeons certificate of disability, October 18, 1889.

Perry, T. B., Assistant Surgeon, ordered to temporary duty at San Francisco, Cal., October 15, 1889.

Vaughan, G. T., Assistant-Surgeon, when relieved to proceed to Evansville, Ind., for temporary duty, October 9, 1889.

ORIGINAL ARTICLES.

ECTOPIC GESTATION.

BY MORDECAI PRICE, M.D., PHILADELPHIA.

In bringing to the notice of this Society the much discussed subject of Ectopic Gestation, my hope is not so much to advance anything new, as to make plain our duty and manner of procedure in these desperate conditions. Bernutz and Goupil, of France, and Parry of our own country, did much to advance our knowledge on this subject, but it remained for Mr. Hallwright to bring it forcibly to Mr. Tait's notice in one of his patients, in whom he had diagnosed ectopic gestation, and urged operation. "The suggestion staggered me," says Mr. Tait, "and I am ashamed to have to say I did not receive it favorably." A second hæmorrhage killed the patient. A post-mortem examination revealed the fact to this great leader in abdominal surgery that Mr. Hallwright was correct in his conclusion, and that the patient could have been saved.

An opportunity was soon offered in Dr. Dolan's case, of Halifax. Dr. Dolan had also diagnosed ectopic gestation, and given as his opinion to the husband that nothing but an operation would save the patient's life. He telegraphed for Mr. Tait, who not only agreed with him, but had the requisite daring to operate, save the patient, and revolutionize the whole treatment of extra-uterine pregnancy. I leave it to you, gentlemen, to judge to whom the greater amount of credit is due—to the practitioner who urged it, or to the illustrious surgeon who performed it.

A pregnancy, as we all know, should be within the uterine cavity, and the only other place is primarily in the tube. That this condition may be possible, the tube must be diseased, its lining membrane removed, its ciliated epithelium no longer urging the product of conception onward to its natural abiding place nor retarding in the least the spermatozoa from intruding on dangerous and forbidden ground. This condition is brought about, I believe, in fifty per cent of the cases, by gonorrhœa, and the remainder by cold, and septic conditions following childbed and catarrhal affections from other causes.

That the pregnancy in the beginning is always tubal, I think is well proven, from the fact that the tube is the only portion outside the uterine cavity offering the conditions favorable for impregnation.

The product of conception thrown into the peritoneal cavity either at the time of impregnation or during the first few weeks of gestation would undoubtedly be digested. We have the best proof of this in the fact that in early ruptures into the peritoneum of only a few weeks, no fœtus can be found; only the blood clot, the diseased tube and membrane remaining. Those cases that have advanced to maturity in the peritoneal cavity have without doubt been those first developed in the tube, and then ruptured in the broad ligament, and when able to resist the digestive fluids of the peritoneum, the secondary rupture has taken place.

We may pass over the other forms of so-called ectopic gestation, for if they ever occur, it is so rarely that they do not deserve our consideration.

Tubal pregnancy would be of but little moment to us, if it were not for the fact that most patients are not aware there is anything wrong. If they suspect pregnancy at all they have no reason to doubt that it is the usual old-fashioned kind, and the first warning, alike to patient and doctor, is rupture of the tube, with symptoms of internal hemorrhage—often so serious that the patient lives but a few hours.

These cases are far more numerous than you would suppose, in our city alone, from all sources, about twenty-five a year; and when you remember that five years ago the mortality was one hundred per cent, and now at least ninety per cent is saved, we have much to be thankful for to Mr. Tait and his adviser, Mr. Hallwright.

The symptoms of ectopic gestation before rupture are of a vague and uncertain character. Those best qualified to properly interpret them, whose experience in such conditions has been greater than any other investigators, have yet to see one and recognize it before rupture. The only reported cases said to have been recognized and treated before rupture have been in the hands of our electrical friends and enthusiastically dwelt upon, and the man who would treat them with a knife given a back seat and denounced in unmeasured terms for his mutilation of the poor woman when it was so easy to get rid of the product of conception by so easy and safe a plan as the electrical current. But we find by investigation that in many of these reported cases there was little foundation for the belief that they were pregnant. Some of them have fallen into the hands of other men and been operated on, and no pregnancy existed. And I cannot but think the others could not bear investigation requisite to a proper diagnosis.

The symptoms after rupture are sufficiently plain and urgent to warn any earnest medical man of the patient's condition. They are as plain as any other surgical affection and more imperative than most. In a woman who has been sterile for a length of time, it may be for years, whose period has been delayed for two or three weeks or longer, after slight exertion or lifting some heavy object, there occurs agonizing pelvic pain and collapse, followed by all the symptoms of loss of blood. If the patient reacts, this is followed by recurring pain and collapse, constant uterine hæmorrhage, it may be with small loss of blood, discharges loaded with shreds of decidua, leaving the impression in the patient's mind that she has had a miscarriage. There is pain and fulness on the side of rupture, with a mass of boggy fluctuating consistency in the pelvis. No one case being

a repetition of any other, there is nothing fixed and unchangeable, save the termination of the disease—death, almost without exception, unless prompt surgical aid is given. I know no better place than just here to call your attention to the terrible mortality of the past. All of Bernutz' reported cases ended fatally.

Dr. Formad, the Coroner's physician, in a letter to my brother, reports nineteen cases of death from hæmorrhage from rupture of tubal pregnancy. All ended fatally in six hours but one. How differently this list compares with that of many operators. All have recovered, save a very small percentage, from the surgical treatment in the hands of these operators.

There are many conditions that may be confounded with extra-uterine pregnancy. In fact, any mass in the pelvis, such as tubal trouble, a small ovarian or dermoid tumor, hæmatocele from traumatism, an abscess of the tube or ovary, gonorrhœal pyosalpnix, all have been mistaken for extra-uterine pregnancy.

Even our electrical friends have mistaken tubal trouble for extra-uterine pregnancy, and wasted many valuable sittings to kill the fœtus, where none existed, and strange to say, they did not cure the diseased tube. How, then, Mr. President, can we ordinary mortals come to a positive diagnosis.

But these mistakes of diagnosis are of small moment, as the conditions which could be mistaken for extra-uterine pregnancy should all be removed by the knife. I have seen the abdomen opened several times when a positive diagnosis had been made, where no pregnancy existed, and a small pus tube or dermoid tumor instead. I am sure the operator was not greatly disconcerted by the conditions found. No one need give himself anxiety; he should feel sure before operating that whatever the mass is it must come away.

In most cases of ectopic gestation in our own hands, the diagnosis was made before operation. Rupture had taken place in every case. Diagnosis of tubal pregnancy before rupture would simply be a happy guess.

Hæmatoceles, that have given our predecessors so much trouble, I think can be credited in great measure to ectopic gestation, and the remaining small number to traumatism.

We have come to that period where experimental treatment of ectopic gestation is a disgrace to our profession. Electricity, with all its barbarous instruments and murderous delays, will, I hope, ere long, be forever thrown aside as a means of treatment for this condition. Its history certainly does not offer to any thinking mind any proof of its value, while on the contrary its record of death is truly appalling. Puncture, or injections into the sac of morphia or any substance with the hope of killing the fœtus is attended with greater risk to the mother than an immediate operation for its removal. I can find no language strong enough to express my condemnation of these experimental methods.

Operation.—Where there is time, the room should be thoroughly cleaned, and all needless articles of furniture removed. A most efficient cleansing of the body with soap and water and brush is necessary, and the bowels should be thoroughly evacuated. No antiseptic should be used. If possible, a trained nurse should be obtained; one who is accustomed to the work of the operator, able to cleanse and take care of a drainage tube and encourage the patient to bear patiently with the discomforts necessarily following an operation of this kind. Opium must be positively forbidden in all abdominal work; it interferes with the secretions, sickens the patient, makes her irritable and hard to manage, and conceals the symptoms of danger and otherwise complicates the recovery.

A good light is needed. Every instrument and ligature and suture should be carefully scalded and placed in trays of warm water, handy to the operator or his assistant, so that in case of any emergency there will be no delay; for time is a material factor in these operations. The shorter the operation the less the shock. It should be minimized in every detail; short incision, careful enucleation, perfect tying, most thorough irrigation with warm distilled water. No antiseptic whatever has any place or purpose in this operation. Antiseptics have done bad work for good operators. We see this admission in the journals almost daily—"perhaps the antiseptic was too strong." Chemical antiseptics of any kind in the peritoneum do murderous work, and should be abolished by law, if our surgeons have not sense enough to discard them in this department of surgery. The after treatment in these cases is of great importance. The drainage tube should be cleansed every half hour for the first day or two, until the discharge becomes small in quantity and serous in character, when it should be removed. The contents of the bowel should be kept in a soluble condition; and it should be purged with Epsom salts upon the slightest indication of peritonitis, when the symptoms will disappear like magic. The patient should be kept in bed from three to four weeks in the most favorable cases, and longer if deemed advisable.

Any member of this Society may be called to do this operation without preparation, instruments or nurses, and I have no doubt you would meet all the requirements of the case possible under the circumstances. With a patient bleeding to death, you cannot wait for anything. Where the surroundings and the condition of the patient will admit, an operator of known skill and courage should be procured.

Salol in Scarlet Fever.—Dr. G. J. Holmes, of New Britain, Conn., in a recent *brochure* on scarlet fever, speaks very favorably of the action of salol, and states his belief that the persistent and careful administration of salol in proper doses, according to the age and general condition of the patient, will, in many cases, reduce the temperature, eliminate the poison, and cut short the disease.—*Med. Rec.*

LAPAROTOMY FOR INTESTINAL OBSTRUCTION.

BY CORNELIUS KOLLOCK, A.M., M.D., CHERAW, S.C.

Read before the Southern Surgical and Gynæcological Association at Nashville, November 12, 1889.

Intestinal obstruction, once regarded as one of the great bugbears of the profession, may now be said to be shorn of much its terrors, and to rank with other hitherto insurmountable difficulties that are every day being relieved by laparotomy. The danger of opening the peritoneal cavity, and thereby producing fatal peritonitis, has been a cherished dogma taught in the medical schools of all countries. It is not a little singular that medical men should so long have been wedded to this belief, whose experience should teach them that the peritoneum is as little liable, if not less liable, to take on inflammatory action than any other tissue of the body, and that when it does become inflamed, it is always symptomatic, and depends on some pre-existing cause. Chomel, than whom there can be no more reliable authority in pathology, said more than forty years ago that he had never seen a case of idiopathic peritonitis. While few in modern times have been so bold as to dare gainsay the opinion of this learned pathologist, yet many have been slow to adopt the idea, and still more slow to act upon it. Even after the intrepid McDowell came to the front, and, impelled by his robust moral courage, opened the peritoneal cavity with the view of removing cysts, there were still those in the profession, both in this country and in Europe, who were more disposed to condemn the operation than to extol McDowell for his brilliant surgical exploit. While this proved that the peritoneum can be divided with impunity, there was still many a doubting Thomas. Some of them were of strength and prominence in the profession, who could not divest their minds of the old idea that a wound of the peritoneum was necessarily fatal. McDowell's success gave quite an impetus to abdominal surgery, and many who had previously stood aloof came forward as advocates of laparotomy. But it had to move slowly and cautiously. Both in America and Europe it was condemned. The celebrated Dieffenbach said, as late as 1848, that "any man who would open the peritoneal cavity was no better than a murderer, and should be placed in the criminal dock and tried for his life." But in time a change came over the spirit of the dream of even the Nestor of Continental surgery, and Dieffenbach's views as regards abdominal surgery were so modified that a short time before his death he expressed the opinion that ovariotomy might be justified where there was good assurance that the cyst had not formed adhesions with the adjacent tissues. If he had lived longer it is probable that he would have been a successful ovariotomist, and a strenuous advocate of laparotomy.

While the history of ovariotomy for the past twenty or thirty years has established the fact that the peritoneal cavity can be entered with safety, and admitting that it can be divided without serious consequences for the removal of a neoplasm, there still exist with many a hesitancy and dread in resorting to it for the relief of intestinal obstruction. But the cautious and patient researches, and the brilliant results of operations of Leichenstern, Bulteau, Rafinesque and Peyrot, on the Continent, and those of H. O. Thomas and Frederic Treves, of England, and R. H. Fitz, of our country, have in the minds of all thinking men established laparotomy for intestinal obstruction as an authorized and legitimate surgical procedure. The time, we trust, is near at hand when no intelligent surgeon will hesitate to open the peritoneal cavity for the relief of intestinal obstruction when assured of the mechanical nature of the obstruction, and of the strength of the patient to stand an operation of as much severity.

A brief report of two cases that came into my hands recently will illustrate not only the necessity of a resort to laparotomy in all such cases, but the importance of the operation being done as early as practicable. To dally with the case day after day till the patient's strength is exhausted and a high grade of peritonitis has set in, is to throw away precious time and to rob the patient of nearly all chances of recovery.

Case I. A stout, healthy lad, æt. 18 years, was seized on the night of August 12, 1888, with a violent pain near the umbilicus. A physician was called, and various remedies were used, such as sinapisms to the abdomen, enemas and large doses of opium, but with no relief. I first saw the case at 6 P.M., August 13, twenty hours after the attack. He was almost in a state of collapse, bathed in a cold, clammy perspiration, and the pulse quick and feeble. Stercoraceous vomit had occurred twice. The enemas brought away nothing except what lay below the point of strangulation. The abdomen was greatly distended and tympanitic. Feeling assured that there was internal strangulation of the bowel, I at once determined to resort to laparotomy. An incision of three inches was made in the linea alba, below the umbilicus. As soon as the peritoneum was opened, a coil of intestine, heavily congested, of a purplish color, made its appearance. Just at this point the strangulation was found. A diverticulum about three inches in length, and attached at its extremity by a shred of fibrous tissue to the mesentery where it joins the gut, formed, with the ileum from which it sprang, a loop, through which the coil of intestine had slipped and become strangulated. The portion of intestine confined was released by simply dividing the fibrous band and setting free the end of the diverticulum. This afforded immediate relief from pain, and in a short time there were one or more movements of the bowels, and large quantities of offensive gas and fecal matter were discharged. This patient made a quick recovery, and has enjoyed uninterrupted health since the operation. A delay of a few hours would have proved fatal in this case. The bowels above the strangulation were highly congested, and of a dark purple color. The patient's strength was failing rapidly from the violence of pain,

excessive vomiting, and the want of nourishment.

CASE II. A young man, æt. 25 years; general health had always been good till sometime during the month of November, when he had violent attacks of what was called bilious colic—by the way, a very unmeaning term, which should be expunged from medical nomenclature. The pain was in the lower portion of the region of the liver and around the umbilicus. Several times during the latter part of November and during the month of December, a number of gall-stones were passed, varying in size from that of the head of a pin to that of a pea. This was, of course, accompanied by violent pain, such as was experienced in previous attacks. On the night of January 2, 1889, there was another attack, more violent and distressing than any of a previous date. The physician called, supposed it was a similar attack to those of former occasions, and resorted to the treatment that had previously afforded relief. The pain, though to some extent paroxysmal, was very intense all the time, notwithstanding that morphia was administered in half grain doses every hour or two for more than twelve consecutive hours. Immense doses of purgative material were administered, in the shape of castor oil, Epsom salts, olive oil, rhubarb and calomel, with no benefit, but doubtless with more or less injury. In the afternoon of January 4, about forty hours after the attack, stercoraceous vomit came on and the patient got rid, through the mouth, of large quantities of fœcal matter, fluid and offensive gas. This afforded more relief than all the anodyne, and the patient was able to take some milk and a little chicken broth, with apparent relish. But in the course of a few hours vomiting returned, and the milk and chicken broth were thrown up in a crude and undigested state, along with more stercoraceous matter. This condition of affairs continued until 5 o'clock on the morning of January 7, 1889, nearly five days after the commencement of the attack. It was then I first saw the case. There was no doubt in my mind, nor was there any doubt in the mind of the attending physician, as to the nature of the trouble. The whole abdominal region was greatly distended, from the ensiform cartilage to the pubes, and there was much tenderness. Pulse 140 and weak, temperature 104°. In this emergency, what was to be done? To leave the patient as he was was simply to turn him over to death. Laparotomy, severe and dangerous under far more favorable circumstances, was the only procedure that offered any hope. This could not promise more than one chance in fifty, in the condition the patient was then in. The consent of the family was readily obtained, and the patient was anxious for the operation. At 6 A.M., January 8, 1889, I opened the peritoneal cavity by an incision of three inches in the linea alba, about one inch below the umbilicus, and search was made for the cause of the obstruction. The colon had become twisted on itself, and a knuckle of bowel had slipped through a slit or aperture in the omentum; and in addition a roll or band of omentum was pressing firmly upon it. The band of omentum was divided, the bowel drawn out and untwisted. This removed the cause of obstruction, and there was soon an audible explosion of offensive gas, followed in a short time by a discharge of fœcal matter.

This operation was in itself a success, and the patient may be said "to have died cured," for the obstruction was removed and all pain had entirely disappeared. Death took place thirty hours after the operation, from exhaustion.

What would have been the chances of this unfortunate young man had the operation been performed earlier, is a question difficult of solution. Being young, with good habits and good health, it is my opinion that if the operation had been done three days earlier, about the time of the first appearance of stercoraceous vomit, he would have stood as good a chance of recovery as any who undergo the operation of laparotomy.

REPORT ON PROGRESS.

THE CONGRESS OF DERMATOLOGY AND SYPHILOGRAPHY, RECENTLY HELD AT PARIS.

BY JOS. GRINDON, M.D., ST. LOUIS.

I doubt whether among all the scientific congresses held at Paris this year, although so numerous and varied that merely to read over their titles is enough to bewilder one, there be one which equals that of dermatology and syphilography either in brilliancy of assembled talent or in the high character of scientific work accomplished. I can hardly refrain from giving a few of the names known to fame which were to be found amongst that goodly company. All civilized lands were represented, even the German Empire finding a sponsor in the person of Dr. P. G. Unna. He received quite an ovation on account of his being the only one of William's subject whose love for science and its amenities was of a sufficiently enthusiastic sort to cause him to face the displeasure of the government at home and visit the French Congress. While Dr. Unna's presence was appreciated, his countrymen were apparently not missed, as it is difficult to see how the Congress could have been better than it was. Our own land was represented by some of its brightest lights in this special field.

An interesting feature was the presence of the venerable Ricord, father of modern syphilography, as honorary president.

I read with regret that the next Congress has been set for 1892, in Vienna. This is a mistake, as doctors, like everyone else, will be crowding to St. Louis that year to attend the World's Fair. I hope that there may be a way of reconsidering the matter.

The first subject appointed for discussion was the definition of the limits of the Lichen group. There seemed to be considerable difference of opinion as to what should be included in this group. The discussion was of so purely technical a character as to possess little interest for others than specialists,and once more shows how much there sometimes is in a name; for the chief benefit derived from this discussion was a better understanding of what different writers mean by the employment of certain names. This is a result of the highest importance. Let the masters continue to meet from time to time and explain their language to each other. This is the more important as it is evident that very varying conceptions of certain affections still continue to obtain.

This is notably the case with Devergie's Pityriasis Rubra Pilaris, which Kaposi identifies with Lichen Ruber, whereas the weight of evidence seemed to be that the two diseases possessed little in common.

The second topic was: Pityriasis Rubra and the primary generalized exfoliative dermatoses. The consensus of opinion seemed to be that Hebra's pityriasis rubra is a pathological entity and that dermatitis exfoliativa is to be subdivided into several species.

The third question was of great interest and was phrased as follows:

1. Should the term Pemphigus be retained as including several bullous affections possessing distinct characters, and modes of evolution and termination? Or should it only be applied to a well defined disease, *i. e.*, chronic pemphigus, whether bullous or foliaceous.

2. On the other hand, where should we class various bullous, erythemato-bullous or still more complex dermatoses, being at times erythematous pustular and bullous at the same time or in other words multiform such for example as pemphigus a petites bulles erytheme bulleux, hydroa bulleux, dermatitis herpetiformis, dermatite prurigineuse polymorphe, herpes gestationis,etc., and what names should we give them?

Our own Duhring, as everyone knows, has been the first to work over this field in a systematic way. The value of his services to science in this particular seemed to be appreciated by all present except Kaposi, who considers Duhring's dermatitis herpetiformis to be an artificial group and without such broad general characters as would insure its continuance.

The fourth topic for discussion was Tricophytosis. M. Butte's treatment is as follows:

℞ Protochloride of iodine, - 1 part.
Lanoline, - - - - - - 9 parts.

Sig. To be rubbed in twice daily after using a warm spray.

M. Guinguaud recommends the above and also uses:

1. Curetting of patches.
2. Application of following:

℞ Hydrarg. biniodid., - 15 to 20 cgms.
Hydrarg. bichlorid., - - 1 gram.
Pulverize in a mortar and dissolve in:
Alcohol, - - - - - 40 grams.
Add:
Distilled water, - - - 250 grams.

After a few days use of above, one should epilate, then curette, and so on, until the cure be complete,which should be in two or three months.

M. Vidal said that if superficial ring-worm was easily cured, it was otherwise when the parasite had penetrated the depths of the hair follicle. When we attempt to epilate the hair breaks off and the diseased portion remains behind, out of reach of parasiticides. It was necessary to seek some other method. Vidal has conducted investigations which have led him to the conclusion that the tricophyton is ærobiotic. Its supply of oxygen should therefore be cut off, and this can easily be done by using greasy ointments. The hair is first cut as close as possible and the scalp rubbed with oil of turpentine. The diseased patches are then painted with tr. iodine, and the head annointed with vaseline containing 1% of iodine or boric acid and covered with a cap of gutta percha or rubber tissue which should be firmly held in place with a bandage. The dressing should be changed morning and evening and the scalp washed once a day with warm suds. Vidal has of late been substituting emplast. vigo cum mercurio, spread on plaster for the painting with iodine.

The fifth topic embraced the following questions relative to syphilis:

1. How soon after infection should specific treatment be commenced? Should it be continuous, or interrupted?

2. With what therapeutic agent should it begin? When should we add or substitute the use of preparations of iodine to that of mercurials? What are the indications for and against the use of mercury? Those for and against the use of the iodide of potassium?

3. How long should treatment be continued?

Should syphilis be treated when not manifesting it self? Is it useful to continue the administration of iodide for the purpose of preventing relapses long after the period of infection?

The first part of the first question was answered: Not until the appearance of the secondaries; by McCall Anderson, Langlebert, Diday, Leloir, Neumann.

Castello, Schwimmer and Mauriac answered: As soon as the diagnosis can be made.

The second part of the first question was answered: Continuous; by Fournier, Castello, McCall Anderson, Langlebert and Leloir; and, Interrupted, by Diday and Mauriac.

To the first question under the second head, Anderson, Langlebert, Schwimmer, Neumann, Kaposi, Petrini and Fournier, answered: Mercury in combination with tonics. Castello answered: Mercurials in combination with iodide. Mauriac answered: Mercury in mild forms and the mixed treatment in severe forms.

Special indications for the use of mercury and iodide.

Langlebert thought the first should be used during the first eruption and again on the return of cutaneous lesions, and the second, immediately, in case of a malignant precocious syphilis, otherwise not till the disap-

pearance of the first eruption. It should be given during the intervals between eruptions and continued for three years after the disease has become latent; that is, during the first two years alternating with periods of rest of equal duration, and during the third year the periods of cessation being equal to three or four periods of treatment, so that the patient would take medicine during, say three or four months of the year.

Leloir said that inunctions of mercury should be used during each outbreak, and the same drug given by the mouth during the intervals; he does not use iodide until the second year.

The opinions expressed as to the advisability of treating the disease in the absence of its manifestations may be inferred from what was said above as to continuous or interrupted treatment, Diday being the only acknowledged master who taught the complete cessation of the treatment in the intervals. He denies that the specifics possess any preventive virtue.

The question of the administration of mercury by the hypodermic needle, which has been so thoroughly investigated of late in France, received careful attention at the hands of the Congress. Suffice it to say that the consensus of opinion was to the effect that the method is fraught with danger, and can never supplant the older procedures. There may remain a small proportion of cases presenting unusual features in which it might be allowable. The treatment by inunction still keeps its place as the most rapidly efficacious and that *per orem* as the safest.

The sixth topic was The Relative Frequency of Tertiary Syphilis; Conditions favorable to its development.

1. What proportion of syphilitics reach the tertiary stage.

a. Without treatment.

b. With treatment.

2. Can any presage as to the tertiaries be drawn either from the chancre or from the secondaries.

3. What is the real value of the influences reputed as favorable to the development of tertiary syphilis? (such as personal or hereditary morbid antecedents, defects in constitution or hygiene, impaludism, alcoholism, traumatism, overwork, depression, etc.).

Neumann stated that the chief causes of the development of tertiaries were: 1. Unsufficient mercurial treatment. 2. Certain constitutional conditions, such as scrofula, tuberculosis, diabetes, etc. 3. Causes of systemic impoverishment.

He believes that tertiary bears no relation to the form or intensity of primary or secondary.

Mr. Drysdale of London, said that for a long time he had treated syphilis without mercury. His personal experience is therefore most valuable, and shows that 8% of untreated cases go on to tertiary. He now gives mercury and acknowledges its benefits.

Mauriac of Paris, said that a mild chancre does not foretell a mild syphilis, nor does a severe chancre a severe syphilis. Nevertheless, it is likely that a phagedenic sore will be followed by severe secondaries, as the same cause which determined the phagedena, remaining active in the system, will exert a sinister influence on the manifestations which follow.

The same can not be said of tertiary accidents which seem to be governed by known depressing agents and also by an undefined something which still escapes our ken.

The proportion of cases going on to tertiary is between 5 and 15%. The average date of its commencement is four years after infection.

The most common tertiary manifestations occur at the periphery, in the skin, subcutaneous cellular tissue and mucous membranes.

About half of all cases of tertiary consists in gummata in and under the skin. External tertiaries often appear at an early date when the chancre has been phagedenic. Bone lesions are much much more rare now than formerly. The oftenest now seen are about the naso-pharynx.

Among visceral accidents, those of the nervous system take the first rank in point of frequency. Those of the liver, lungs, kidneys and heart are much more rare.

We see a large number of cases of visceral syphilis, in which the cutaneous accidents have never exceeded the secondary type, and have even been quite infrequent and of a mild sort. On the other hand, how many syphilitics exhibit skins scarred by the most violent syphilodermata without ever having suffered from visceral involvement.

Fournier's study of 2595 tertiary cases gave him the following results:

a. Tertiary manifestations increase in relative frequency from the first to the third year.

b. They reach their climax in the third year.

c. They present a rather rapid and almost regular continuous decrease in point of frequency from the fourth to the eleventh year, the average still remaining rather high.

d. They continue to decrease, although much more slowly, during the next ten years.

e. Beyond this time, that is from the twenty-first to the thirtieth year, they are uniformly very rare.

f. After the thirtieth year these accidents are exceptional.

Among Fournier's cases were 1085 of syphilis of the nervous system, which led him to remark that whatever the syphilitic principle might be, it constituted a poison to the nervous system.

Haslund of Copenhagen attributes tertiary to deficient mercurial treatment. Impaludism, alcoholism and other depressing causes play an important role. Tertiaries are generally developed during the twelve years following infection.

Vadja of Vienna believes that tertiary is most frequent among those who have received no treatment, and next among those who have only had iodide. It is rarest among those who have been given mixed treatment.

Leloir suggested that the terms resolutive syphilo-

mata and destructive syphilomata be substituted for secondary and tertiary.

Besides the questions proposed by the committee of organization there were others taken up by the congress, of which we will notice a few.

M. Wickham of Paris, made an interesting communication in which he corroborated the views recently set forth by Darier, in regard to the etiology of Paget's disease of the nipple. We will reserve a more extended notice of this important subject for another time. Suffice it here to say that these gentlemen have found in the affected tissues small rounded bodies belonging to the class of sporozoa and order of psorosperms. This interesting affection is therefore added to the list of parasitic diseases. It would seem that the influence of psorosperms on the development of cancer is well established as far as Paget's disease is concerned.

M. Darier recalled a recent contribution of his in which he had described another affection due to psorosperms; vegetating follicular psorospermosis, characterized by the appearance of lesions apparently consisting of a papule covered with a crust, but the latter being removed, one becomes aware that it is in reality not a crust, but a little plug of horny matter which is prolonged into the dilated orifice of a sebaceous follicle by a softer extremity of a sebaceous appearance. These lesions are largest and most plentiful in the armpits and groins where they form, by their union, nodulated tumors.

Investigations are now being prosecuted which tend to show that molluscum contagiosum is likewise a psorospermosis.

Taking into consideration the fact that the presence of psorosperms in Paget's disease gives rise to true epithelioma; that follicular psorospermosis is sometimes accompanied with enormous papillomatous vegetations of the walls of follicles; that similar growths occur in the psorospermosis of rabbits, and that in molluscum contagiosum there is a cell-proliferation which (in the minds of some) is caused by psorosperms; may one not imagine that possibly these parasites are often the cause of proliferative reaction in epithelial tissues?

Ducrey of Naples, communicated a report of his ingenious experiments in cultivating the germ of soft chancre in its "normal" medium, the living human skin, which after having sterilized and inoculated he covers with a watch-glass, sealed in place. He believes that he has identified the microbe.

Arnozan of Bordeaux, related a post-mortem on a woman dying of phthisis during the course of Raynaud's disease in which there was found an obstructive endarteritis of the deep vessels of the hand. Bartholemy's report on acne will be noticed at another time.

Landouzy, Fournier, Hardy and Arnozan related cases apparently establishing the contagiousness of tertiary syphilis.

I fear that in making this brief report I have omitted matter as valuable as any that I inserted. One is confronted with a veritable *embaras de richesse* in attempting to make a selection. I hope, however, that readers may glean from the foregoing some idea of this spendid scientific entertainment the record of which stands a monument to French medicine and French enterprise.

The Value of Caffeine in Adynamic Conditions.—In spite of the continued endeavors of Dr. Huchard, of Paris, to demonstrate to the medical profession the value, and simultaneously the harmlessness, of large doses of caffeine, still there seems to be a prejudice against the drug and a ruling idea that its free use is likly to produce unpleasant cardiac symptoms. New remedies, of doubtful efficacy, that are springing up daily, find no lack of advocates, while many comparatively older drugs do not receive the attention that their curative properties warrant. This is Huchard's complaint as he once more brings to the notice of the profession the value of large and repeated doses of caffeine in all adynamic conditons. As an example of its efficiency, Huchard, in the *Therap. Monatshefte* for August, cites the case of a gouty man who was suffering from a right-side pneumonia, and who, twelve days later, developed an inflammation of the left lung. The patient fell into a condition of extreme adynamia, and collapsed. During the following thirty days Huchard gave this patient 95 hypodermic injections of caffeine, of 4 grains each, 51 injections of ether, and 19 of trinitrin. The result of the treatment was satisfactory beyond all expectations. The author quotes five cases in which the value as well as harmlessness of the drug in large doses is clearly demonstrated. He employed it in four other cases of pneumonia; in such instances "the disease is in the lungs but the danger in the heart." Huchard does not hesitate to employ subcutaneous doses as high as 31 to 48 grains. The reported efficacy of daily doses of 3 to 5 grains is entirely illusionary.

Dr. Huchard's experiments upon animals proved that the drug acted upon the central nervous system before it influenced the heart. There is, therefore, a marked differaence between the action of digitalis and caffeine. Digitalis affects primarily the heart, caffeine the nervous system.

In conclusion, the author asserts:

1. That the great value of large doses of caffeine, given subcutaneously, in all adynamic conditious is unquestionable.

2. That large doses of caffeine are entirely harmless. —*Med. News.*

W. C. T. U.—Again a Chicago doctor has sued Miss Frances E. Willard, President of the Women's Christian Temperance Union, for $50,000 for some trouble connected with the jurisdiction over a hospital managed, or sought to be managed, by the Union.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,

EDITOR.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, NOVEMBER 23, 1889.

THE SOUTHERN SURGICAL AND GYNÆCOLOGICAL ASSOCIATION.

This Association, on Thursday, November 14, completed a most valuable and delightful three days' session at Nashville, Tenn. There were congregated the bright lights of the Southern medical profession, and, in addition, were to be seen many of the lights of similar magnitude from the North and East. One may indeed feel pride in being a member of such a body of men. Originality, progressiveness and intrinsic ability were stamped on every paper, and the discussions were not lacking in the same characteristics. Assurances of future sucess of this association are now wholly out of order, and congratulations for the undoubted fulfilment of the mission it was intended to accomplish—that of effecting an organization of the working forces of the South—are well deserved.

That this is essentially a working society, was shown by the little time—practically none—taken up by routine business, this being conducted by committees appointed for the purpose. Three sessions were held daily, and each was begun promptly at the time determined upon at the previous adjournment; as a consequence, the social features, usually so prominent at such meetings, received but little attention at this one. The banquet given at the Maxwell House on the afternoon of the third day, afforded an enjoyable means of relaxation from the arduous labors just finished.

Every delegate must have felt well repaid for his attendance on this meeting.

As to the election of officers for the ensuing year, we of St. Louis have reason to be proud of the fact that one of our number was selected to fill the honorable position of president. The choice of the ballot was as follows: President, Dr. Geo. J. Engelmann, of St. Louis; First Vice-President, Dr. B. C. Hadra, of Galveston, Texas; Second Vice-President, Dr. Duncan Eve., of Nashville, Tenn.; Judicial Council, Dr. Hunter McGuire, of Richmond, Va., for five years, and Dr. Bedford Brown, of Alexandria, Va., for one year. The other officers were re-elected.

THE MCDOWELL MEDICAL SOCIETY.

The twenty ninth semi annual meeting of the McDowell Medical Society was held at Henderson, Ky., on Nov. 11, under the officership of Dr. J. E. Pendleton, of Hartford, Ky., President; Dr. John Young Brown, of Henderson, Vice-President; and Dr. S. S. Watkins, of Owensboro, Secretary.

The papers read were interesting as well as practical, and the discussions were quite animated, evidencing the time-honored disposition of doctors to disagree.

All members and visitors were most emphatic in voicing their appreciation of the whole-souled manner in which they were entertained by the local members of the profession, Drs. Dixon and Brown coming in for the lion's share of the praise for their tireless efforts to make things agreeable.

The "'possum supper," which closed the festivities, was a novelty to many, a source of great pleasure to all.

We will publish, in an early issue of the REVIEW, the proceedings of the McDowell Society, as transacted at this meeting.

MARASMUS AND OTHER VAGUE CAUSES OF DEATH.

At the late meeting of the American Public Health Association, at Brooklyn, Dr. Ashmun, of Cleveland, read a paper in which he called attention to the evil results of the practice of some physicians who employ the term "marasmus" to cover a number of causes of death in infants. The *New York Med. Jour.*, discussing the matter editorially, upholds the views of the writer, and believes it to be the duty of registry officers in Boards of Health to refuse to accept certificates of physicians who habitually resort to such vague expressions as marasmus, infantile asthenia, atrophy, debility, or cardiac syncope, which meant little more to writer or to reader than that death had taken place. "Statistics are of little value where such vague forms of notification are in vogue, and reports of institutions are, in too many cases, robbed of their utility to the student of the causes of infantile mortality by the evasion and omission of the true causes of death." This evil was supposed to be due to indifference, to carelessness, to a desire to conceal, as well as to ignorance on the part of the profession.

The other side of the question is presented by Roger S. Tracy, M. D., in a letter to the *New York Med. Jour.* He states that it is often impossible, even after a care-

ful autopsy to state why a child should have wasted away and died. In the New York Foundling Asylum, where 500 babies die every year, and autopsies are frequent, the cases of so-called marasmus seldom show any evident cause of death other than the lack of nutrition, which was just as plain before the autopsy as after. He very pertinently asks: "What better cause can be given in such cases than marasmus, atrophy or inanition?" If registry officers were to make a practice of returning such certificates, marasmus, atrophy, etc., would undoubtedly disappear from the mortality reports, but the causes given in place of them would be mere guesswork, and would vitiate the figures of other diseases to which they were referred. It is much better where the cause of death is not known, to plainly state the fact in terms that other doctors understand. He then proceeds to show the percentage of ill-defined causes of death to the whole number of deaths in Berlin, London and Paris, where the standard of medical education is supposed to be, and without doubt is, higher, and where stricter regulations are enforced. If deaths from premature birth and *lebensschwache* (lack of vitality) are omitted from the totals of deaths under five years, we have for Berlin, London and New York, respectively, 1,208, 2,854 and 1,248 deaths from indeterminable causes, or 7.18, 8.29 and 7.19% of the respective totals.

There is probably a large amount of ignorance and carelessness displayed in certificate-giving, but to return the certificates in cases such as the above would only make matters worse, looking from the standpoint of reliable statistics. We doubt whether there is any immediate remedy for this state of affairs; the proper remedy, higher medical standards, is at best an indirect one, and will require some time in its accomplishment.

Chloroform Versus Ether at Night.

It has long been taught that in making a choice of an anæsthetic for use during an operation at night, chloroform should be given the preference to ether, other things being equal, on account of the easy inflammability of the latter, with the possibility of a serious explosion.

It appears, however, from recently published observations by various authors, that chloroform possesses a very serious disadvantage in its property of decomposing when exposed to a light. It splits up into hydrochloric acid, free chlorine gas and other less important by-products. These, according to Prof. Zweifel (*Berl. Klin. Woch., Med. Chir. Rundsch.*) are capable of awakening more or less serious inflammatory changes in the lungs of the patient with, in all cases, the disagreeable concomitant of cough. This is most important in cases of laparotomy, where coughing causes a painful stretching of the wound, and may interfere with its proper and complete union.

Zweifel believes that a laparotomy should be avoided as far as possible where a bronchial catarrh exists, as the voluntary suppression of the cough to avoid pain might result in serious consequences from the accumulation of secretion. This rule he has followed for years, but in spite of this he noticed for some time past a large proportion of bronchial catarrhs and catarrhal pneumonias in patients after operations, and this following the placing of a number of additional lights in the operating room. The lights were frequently brought into use both at night and also during the day whenever the light was poor, by reason of cloudy weather, which was frequently the case. From December 8, 1888, to February 8, 1889, 9 laparotomies were conducted with artificial light under chloroform narcosis; 2 cases, cæsarean sections, remained free from lung complications, but all the others were affected in a more or less degree, some having only a cough, some bronchitis and others catarrhal pneumonia, to which latter disease 1 patient succumbed. The worst effect was always noticed in those last operated on, where several operations were performed in succession, presumably because of the greater degree of saturation of the air with noxious vapors.

Since that time Zweifel has ordered the use of ether where artificial light was employed, and has had no more lung complications save in one case where catarral pneumonia followed the inadvertent use of chloroform.

The above is very significant and should serve as a useful hint. As regards the inflammability of ether, accidents from that cause are quite rare, or else the cases are not reported. The risk does not seem to be great, provided the light be not brought into too close proximity to the ether-cone; numbers of operations are conducted with a distance of, say five or six feet, between cone and light, with never an explosion.

The Diagnosis and Treatment of Functional Disorders of the Stomach.

An article with the above caption in a late number of the *Med. News*, by F. P. Henry, M.D., contains a digest of all the more recent knowledge obtained by scientific investigation as to the etiology of functional gastric disorders, with suggestions as to their rational treatment. The distinction between functional and organic disorders is by no means sharp, and this, while true in general, is particularly applicable to diseases of the stomach, of which the disorders of function are generally, sooner or later, associated with some organic defect, disorders of secretion being frequently accompanied by some impairment of motor power, or even some alteration in the secretory tissue.

Functional gastric disorders are all included under the heads of secretion, disordered motion and impaired innervation.

With regard to the presence of lactic and hydrochloric acids during digestion, the normal act may be divided into three stages. During the first, which lasts about half an hour, lactic acid alone is present; later,

hydrochloric acid is also present; and, finally, there comes a stage when the only acid present is hydrochloric. The last stage may begin a half hour after eating, or at the latest, an hour thereafter. In disease the duration of these stages may be variously modified. Lactic acid is an adventitious product of the fermentation of carbohydrates, while hydrochloric acid is the more active and essential aid to digestion.

Where lactic acid is present in excess it may give rise to pyrosis, and in fact the latter is chiefly caused by that condition; the earlier pyrosis appears after the ingestion of food, the more certainly is it due to this cause. Excess of HCl is also a cause of pyrosis, as well as a hypersensitiveness of the gastric nerves, even where the gastric juice is of subnormal acidity.

Hypersecretion is a well marked condition, of which the principal symptoms are increased thirst, acid eructations, nocturnal attacks of epigastric pain and dilatation of the stomach. In this condition digestion of the carbohydrates is impaired, while that of albumen is abnormally vigorous. Positive proof of its existence may be afforded by withdrawing the contents of a fasting stomach and examining them. Hypersecretion is probably always caused by disordered innervation, and may be continuous or paroxysmal, the latter often coinciding with the gastric crises of tabes.

There are various tests for estimating the motor power of the stomach, such as washing out the stomach seven hours after a meal, when no food should be found; the other test with salol, and that with olive oil, are not generally applicable.

Nervous dyspepsia manifests itself by eructations which are mostly tasteless and odorless, a sense of fulness and pressure in the epigastrium, with pain, often independent of the quality of the food, but most readily induced by fatty and acid articles of food. Capricious appetite is a characteristic feature, and insomnia is frequently present. The stools are not regular. The diagnosis is made by exclusion.

In the treatment of lactic acid pyrosis sodium bicarbonate is but an evanescent palliative. The administration of HCl during or immediately after a meal is more suitable.

Pyrosis of HCl may be due to hyperacidity or hypersecretion. In both cases alkalies may be given four to six hours after a meal. In hypersecretion, methodical washing of the stomach just before the principal meal, with at first an exclusive albuminous diet, as carbo-hydrates ferment, and only aggravate the disease.

Water should be allowed only in small quantities, and when the sense of thirst becomes unbearable, it may sometimes be well to obtund it by small doses of opium.

In cases of motor insufficiency, in addition to general hygienic measures, the vegetable bitters, especially strychnia, and alcoholic stimulants may be used to advantage.

The treatment of nervous dyspepsia varies with its cause. General supporting measures, massage, electricity, the bromides, and, if anæmia exists, arsenic and a mild non-constipating preparation of iron, such as the potassio-tartrate, are the chief indications.

MEDICAL ITEMS.

A Srvere Indictment.—*Lanphear's Medical Index* says that Hot Springs, Ark., contains sixty practicing physicians. Of these, seven are regular, and the rest thieves or quacks, or both.

Somnol.—Still another new hypnotic is "Somnol," says the *Med. Rec.* It is an ethyl-chloral-urethane ($7H_{12}Cl_3O_3N$). It is given in doses of about thirty grs. It has been discovered by M. Radlauer, of Berlin.

More English Investments.—One of the latest reports concerning the lines of business, in which English capitalists desire to invest their money, involves the purchase of a number of patent-medicine concerns in this country.

Chinese Lepers.—Five Chinese were shipped home from San Francisco, Oct. 29, on a Hong Kong steamer. Among them was a man who was sent to San Francisco. from New York, where he had been employed as a cook for laborers on the Croton Aqueduct work.

A Peculiar Damage Suit.—Dr. Robert H. Duncan, the surgeon of the Pacific Mail Steamship *Colon*, has brought suit against the city of Brooklyn for $60,000 damages, on the ground that he had intermittent fever, and the Brooklyn health authorities, acting on the belief that he had yellow fever, had him removed to quarantine.

A Homœopathic Tempest in a Teapot.—That the female sex make, on occasion, as good fighters as anybody else seems to be indicated by a very lively row in the Hospital of the Womens' Homœopathic Association, of Philadelphia, where one woman of the staff is engaged in ejecting another for practicing Christian Science under the Eclectic medical diploma in a Homœopathic institution.

Cannibalism.—A medical student, of New York, is reported to have manifested his lunacy by the strange freak of eating a portion of a body of a negro, which was being dissected.

A somewhat similar tale is told of the janitor of a pathological museum, whose fondness for alcohol was such that at times he drank the alcohol in which the specimens were being preserved. Whether the tincture of cancer, liver, kidney, etc., had any medicinal effect is not known.

Mrs. Partington to the Fore.—Two ladies had a conversation relative to the late war. One of them

was angry because of the fact that Mr. Jefferson Davis is disfranchised. "Disfranchised, did you say?" exclaimed the other. "How long has he been disfranchised?" "Why, ever since the War." "Well, now, I never heard that before, and I do not understand how that can be. I am sure Mrs. Davis has had one or two children since the War."—*The Med. Standard.*

The American Hospital at Teheran.—The corner-stone of an American hospital at Teheran was recently laid by the minister of the United States to the Court of the Shah. The proposal to erect the hospital originated with Dr. W. W. Torrence, of Teheran, and funds have been obtained partly by donations raised in America and partly by subscriptions in Persia itself, many distinguished Persians having made generous contributions.

Transmission of Disease by Brushes and Dental Instruments.—A discussion recently took place at the Conseil d'Hygiene concerning the transmission of certain diseases by hairdressers and dentists, the brushes and instruments being used in common for all their clients. M. Lancerreaux wished to have stringent measures enforced, and cited a case of phthisis which Dr. Cochran, an American dentist, alleged was transmitted by a dentist's instrument; M. Dujardin-Beaumetz and others declared that there were great difficulties in the way, but recommended great care in schools and public institutions.

Women in Medicine.—The *Boston Post* says that there are 3,000 medical women in the United States, whose incomes rage from $5,000 to $20,000 a year; this is probably an overestimate, both as to number and income. The number is increasing every year, and the supply of "lady doctors" bids fair to be as great as that of the male physicians. Austria is the only civilized country in the world which prohibits women from entering the medical profession. Russia and China permit them, and the Queens of Italy and Roumania employ women physicians.

M. Ricord's Funeral.—The Paris correspondent of the *Brit. Med. Jour.* writes: Professor Ricord's funeral took place Saturday, October 26. It was an imposing ceremony. The coffin and hearse appeared buried under the enormous quantity of wreaths placed on them, bearing testimony to the personal esteem he won during life-time; and the military honors rendered to the deceased were evidence of the worldly distinction he had attained during his professional career. M. Pean spoke in the name of the Academy of Medicine, and M. Fournier represented the pupils of the late distinguished professor.

Is Man Left-Legged?—Dr. W. K. Sibley read a paper before the British Association in which he argued that man was naturally left-legged. Standing working with the right hand, there was a tendency to balance on the left leg. Race paths were nearly always made for running in circles to the right, and the majority of movements (such as dancing, running, etc.) were more readily performed to the right. In walking, it was natural to bear to the right; crowds as well as individuals did so. Troops stared off with the left foot; the left foot was placed in the stirrup or step of the bicycle in mounting; the left foot was the one from which a man took off in jumping. From measurements made by Dr. Garson of the skeletons of the two legs, in 54.3 % the left leg was the longer, and 35.8% the right. From measurements of 200 pairs of feet, it was found that in 44% the left, and in 21.5% the right,was longer, while in 34.5% they were equal.—*Med. Rec.*

England and the Opum Trade.—It was recently moved in parliamen that, at the next revision of the Tientsin treaty, the Chinese Government be allowed to extinguish the opium trade if it thought fit. The resolution was, however, opposed by Dr. Farquharson on the strange grounds that the opium habit was not as bad as the alcohol habit, either in its effects upon the system or in its relations to crime ; and on the strength of this flimsy argument the resolution was defeated by a vote of one hundred and sixty-five to eighty-eight. There are said to be twenty-five million opium-smokers in China,and the number of deaths directly attributable to the effects of this poison reaches one hundred thousand annually. When some thousands are drowned by floods in the Hoang Ho Valley, the world is shocked, but the fact that ten times as many people are sacrificed every year in consequence of the forced importation of opium into China moves the English merchant not a whit.

Heroic Treatment of Pneumonia.—The Russian peasants have little faith in expectant treatment, and believe that disease is an enemy that can be overcome only by powerful weapons. Nekrasoff, a Russian poet, in his "Red-nosed Frost," depicts graphically the treatment that is pursued in pnemonia, which is not very dissimilar in some respects to that followed by some of our brethren in Germany. When the patient came home sick, after being exposed in a snow-drift for several days, his mother poured cold water over him from a watering-pot, and then put him in a hot bath. But this brought no improvement, and then they called in the old woman of the village, and on their advice gave the patient a good rubbing and then put him several times in a sweat-box. These measures failing, they gave him a cold bath by letting him into a hole in the ice, and followed it up with a sweat in the hen-roost. The poet remarks that the man submitted to all this like a dove, but got no better notwithstanding. Then a peddler, who happened to drop in, suggested that they put the patient under a bear so as to have him well kneaded. At this point, however, the wife interfered, and forbade further torturing of her husband, and the poor fellow soon after died in peace.—*Med. Rec.*

BOOK REVIEWS.

ANNUAL OF THE UNIVERSAL MEDICAL SCIENCES, A Yearly Report of the Progress of the General Sanitary Sciences throughout the World. Edited Charles E. Sajous, M.D., Lecturer on Laryngology and Rhinology in Jefferson Medical College, Philadelphia, etc., and Seventy Associate Editors, Assisted by over Two Hundred Corresponding Editors, Collaborators and Correspondents. Illustrated with Chromo Lithographs, Engravings and Maps. F. A. Davis, Publisher, Philadelphia. 1889.

This magnificent collation of the world's advance in medicine and surgery during 1889 needs no laudation after it is once inspected. The character of the contents, the typography and the illustrations, etc., all harmonize in making up a set of volumes that will not only adorn any library, but should be part of the *armamentarium mentis* of all the progressive members of the profession.

Everything that is good is yet capable of improve ment; so that, notwithstanding the universal approval with which the 1888 issue of the Annual met, a year ago, the present volumes have been altered in the following respects:

1. Foreign weights and thermometric measurements have been reduced to those generally used in this country. Grammes have been reduced to ounces, drachms, grains, etc., and Centigrade degrees to Fahrenheit, both appearing side by side.

2. The dates of all journals referred to are mentioned in the text, thus greatly facilitating research.

3. An index has been added to each volume besides the complete triple index at the end of the entire work.

4. The "therapeusis" column of the index, presenting a resume of all remedial measures introduced or recommended during the year, contains 48 pages more than the first issue.

5. Dosage not furnished by the original author, and therefore not to be found in the text, has been inserted by the editor of the therapeusis column.

6. Instead of being 54 pages in length as last year, the index is 101 pages long in this issue.

7. Four thousand quotations more than last year, received principally through the corresponding staff, increase in proportion the value of the work.

8. The practical worth of each article has been increased by giving a careful description of treatment, operations, etc., and by the reduction in weights, thermometric measurement, etc., mentioned above.

9. Two departments have been added—"Examination for Life Insurance" and "Railway Neuroses—subjects of great importance to a large proportion of the profession; and, finally,

10. The volumes have been made less clumsy, notwithstanding the greater amount of matter presented, by closer calendering of the paper and avoidance, as much as possible, of all blank spaces and repetitions in the text.

SOCIETY PROCEEDINGS.

THE SOUTHERN SURGICAL AND GYNÆCOLOGICAL ASSOCIATION.

The President, Dr. HUNTER MCGUIRE, in the chair. Dr. R. B. MAURY, of Memphis, Tenn., read a

REPORT OF GYNÆCOLOGICAL WORK, WITH ESPECIAL REFERENCE TO METHODS.

He attributes the successful results in his practice to:

1. The careful preparation of the patient, regard being given to cleanliness in every particular.
2. Aseptic instruments.
3. Aseptic ligatures.
4. The rigid exclusion of outside structures.
5. The substitution of irrigation for sponging, using hot water and excluding antiseptics of all kinds.
6. Drainage.
7. Short incisions; careful replacement and spreading out of the omentum.
8. The inclusion in placing the sutures of all the abdominal muscles.
9. The use of means for moving the bowels on the third day, and the avoidance of opium.

Out of 43 cases, only one had hernia, and this was the result of leaving off the bandage too early. In one case, the pedicle ligature was cast off 16 months after the operation.

Of extra-uterine pregnancy cases, Dr. Maury reported four, two of these having been cited previously. Case I was diagnosed and abdominal section advised by him, but was postponed for three days on account of the objections of the husband; the patient was then operated upon and stood the operation well but died three days later from peritonitis. Case II gave evidence of the trouble by bloody discharge, swelling of the abdomen, and pain sufficiently severe to require the use of morphine. Vomiting continued for a long time. The reader saw her the first time, September 15, when the entire abdomen was swollen and tender; the tumor arose as high as the navel. He diagnosed tubal pregnancy of four months duration, and admitted that the only chance was immediate operation. He proposed to destroy the fœtus with electricity. A Gaff battery was used and a complete decidual mass was expelled. The battery was not resorted to thereafter, and laparotomy was done on Sept. 20. On making the section, a dark tumor was found in the belly; introduction of the canula gave exit to a dark looking fluid. It was found to be a four months fœtus. The abdomen was not appreciably decreased in size by the operation. The next day the pulse was 96°, temperature 99°. There was a large watery drain from the sac. On the fourth day she died.

In Case III the sac ruptured at eight weeks, but recovery ensued. Case four was operated upon, and she recovered from the operation, but died a month later from tuberculosis. An autopsy on this case demonstrated that the fœtal sac was entirely extra-peritoneal —a rare thing, and the first case of the kind published.

The reader's operations for lacerated cervix were invariably successful. Martin's method of colporrhapy was strongly commended. No vaginal douches were used after operations. The rectal tube was thought to be of immense value. There was nothing like sepsis in any case which he had.

DISCUSSION.

Dr. W. H. Wathen, of Louisville, spoke first on the subject of ectopic pregnancy. "In regard to the first case, Dr. Maury thinks a great error was committed when, after the woman had suffered severe pain and some shock, laparotomy was not immediately performed. If this was an error for Dr. Maury, it is a universal error of the profession, because the operation is not usually done where the rupture occurs only in the folds of the broad ligament, as evidently it had done in this case, and too without any excessive amount of hæmorrhage. The second rupture was through the folds of the broad ligament into the abdominal cavity, with hæmorrhage and shock. Had the operation been done immediately, this case would have resulted favorably, probably. The chances were diminished by delay. But just here is a great obstacle which occurs in cases of this kind: The consultation has to contend against popular impressions, hence the great mortality that attends this class of practice.

Dr. Jos. Price, of Philadelphia, presented two pathological specimens which very beautifully demonstrated how little reliance can be placed on a diagnosis of extra-uterine pregnancy—that is, a positive diagnosis. The history of the first case was doubtful; there were rational symptoms of pregnancy, recurring attacks of pain; if she had not had a high temperature and rapid pulse, probably one could have made a shrewd guess and said it was ectopic gestation, and been correct. These specimens also demonstrate the difficulty of makiug a diagnosis after you have the specimen in your hands. Before incising it, I asked the gentlemen who were assisting me in the operation, and those observing it to make a guess as to its nature, and all were wrong. I presented it to the Society at Philadelphia, and they likewise failed—even those who claim to make positive diagnosis. Now, I think it is impossible to make a positive diagnosis. It may be simply a suppurating dermoid, an abscess of the ovary and tube, or ectopic pregnancy.

In one case, Dr. Maury said that his faith in the ability to diagnose was shaken; but in the other he said the diagnosis was positive. He has no means of making a positive diagnosis, since it is impossible.

In regard to Schroeder's position, it was always doubtful, and it is not fair to go on record as counselling that it is always better to delay. Many cases of ectopic gestation die of aneurism like a shot from a minie ball. More than 50% of them go into the coroner's hands without any one seeing them. My cases in Philadelphia number about 19, the coroner's, 27; his are all dead, mine are all living. It demonstrates the importance of promptitude. It is your duty to act promptly.

With reference to perineal lacerations, I would call attention to the fact that in 19 out of 20 of them, the sphincter is a sufferer. And yet I believe Emmett is the only one who always closes the sphincter. The modern flap splitting methods are imperfect proceedure. I have seen a number of them that were claimed to be perfect results, but in each you could demonstrate a little half-moon dimple in the sphincter that has never been touched.

Dr. Potter, of Buffalo, New York.—I was particularly interested in Dr. Maury's summary of the details of his abdominal work.

I think that among most operators, the short incision must commend itself for various reasons. And again, with regard to the ligature, it is a matter of importance not only as to the material, but also as to its methods of preparation. Dr. Maury summed up in almost a single phrase the preparation of the silk ligature, and it covered the ground. But while on this subject, let me say a word about the knot: the question has long interested abdominal surgeons as to what knot is the best one, for the pedicle, for instance. Tait is the father of an excellent knot, which he has named the Staffordshire knot; Bantock has given us an excellent knot; but it is a difficult thing for a person who has never seen these expert operators use them to get an accurate enough idea to put into practice. I believe that the simple knot, well tied with proper material, is quite good enough, and the one that I would call particular attention to is the simple figure-of-eight. The simpler the knot the smaller the amount of material and the less the liability to slip. The question of washing out the abdomen, which Dr. Maury touched on so pleasantly, is one of prime importance in this work. In so many cases the cavity is left more or less soiled, in spite of the greatest care.

I think the idea of flushing the abdomen after the operation has contributed as much as anything else to save lives. Only lately it has been my lot to fall in with a dermoid cyst, from which more than a gallon of pus was withdrawn; the woman was septic in an extreme degree; adhesions numerous and tenacious. In spite of the great care, the abdomen was more or less soiled with pus and other material, and she became well nigh collapsed before the abdomen was closed. A flush of water as hot as could be borne was poured into the belly without fear, and to an extent that would seem almost unnecessary, but she rallied before she was taken from the table. A few years ago, I should have lost that patient.

Dr. Jos. Taber Johnson, of Washington, D. C.—I wish to say a word in accentuation of the difficulties in the way of positively diagnosing ectopic pregnancy. I saw Tait operate on a case last August. The woman was in the office one day, hardly complaining but wishing to be examined; the next day she was on the operating table with the abdomen filled with blood. And still another difficulty: it took the strongest glass to demonstrate the little fœtus lying at the bottom of the tube, but there it was.

How could anyone have diagnosed that case? An other case I saw in June. The patient was nursing a child a few months old; she had colicky pains in connection with menstruation. I examined her under chloroform while she was in one attack, and found a lump on the left side. She had another attack, and I came with the instruments to operate, but the husband backed out. Four days later I examined the pelvis; the lump had disappeared. I went to Europe, and she had another attack; another gentleman operated, found blood, and removed the tube, which is reported as extra-uterine pregnancy. Another case was supposed to be one of fibroid of the uterus. The woman had never been pregnant. At first I thought it was fibroid, but strange to say, the woman was half way insane. The next time I examined her, I found a lump. They would not allow of an operation, and the woman went on and died presenting the symptoms of puerperal mania. The sac had been punctured with a trocar, and she died as a result of the refilling of the sac.

Dr. Price says that Emmett is the only one who catches the sphincter ani muscles in the operation of perineorrhaphy; Tait always does this. He passes the stitches deeper and stronger than anyone I know of.

Dr. Price.—I hold it impossible to expose the ends of the sphincters in the flap splitting operation, without at the same time removing the scar-tissue. I can report more failures than successes by various operators. It is not rare to find malignant degeneration of this scar tissue commencing at the sphincter or down about the anus; I could record at least half a dozen in colored women, a class in which malignancy is very infrequent.

Dr. Maury.—My position in regard to the difficulty of diagnosing ectopic gestation is entirely in accord with that of the speakers. I had no faith in the ability to diagnose it in the third month, previous to rupture. It is generally conceded that in the early weeks of this abnormal gestation, the proper method is to shell out and tie off; in the later months, it is also generally conceded that if the fœtus is between the layers of the broad ligament, we cannot shell out and tie. The second case was four months gestation; I did not lose time; I made my diagnosis and operated five days afterwards.

Dr. W. O. Roberts, Louisville, read a paper entitled

Direct Herniotomy, With Cases.

It was an abstract of his last 14 months' work in that class of cases. In case of direct inguinal hernia, Mr. Ball's operation was chosen, the neck of the sack being twisted and the stump stitched to the pillars of the canal. A drainage tube was used in one case only. There was no suppuration in any case. In the operations for umbilical and ventral hernias, the practical difference is but little. Methods of dealing with umbilical and inguinal hernias, on the other hand, are quite numerous. The manner of treating the ring also varies much. It may be said that the prime object is to effect a closure of the abdomen and to impart to it the strength to keep it closed. The question of whether the patient shall wear a truss or not afterwards is answered in various ways, some claiming that it is beneficial, others just the opposite. It may be said that whatever the operation selected, a good percentage of relapses will occur, and there is no procedure which is wholly devoid of danger.

Discussion.

Dr. G. Frank Lydston, of Chicago.—I am interested in such practice, especially hernias in which strangulation has not yet occurred. The field of usefulness for the radical cure of hernia is greater, I believe, than is commonly suspected. Dr. Roberts invited an opinion regarding the indications for the operation for the radical cure of hernia; I wish to submit these: 1. Incarcerated and irreducible hernia; 2. Strangulated hernia; 3. Cases in which the hernia is productive of severe discomfort which cannot be remedied by mechanical or other appliances; 4. Patients whose work is such that they are in danger of injuring themselves at any time. With regard to safety of the operation, statistics of recent operators show that it is one of the safest and most successful operations in connection with the abdominal cavity. It is not attended with as much danger as is laparotomy.

There is a peculiar phase of practice that I am unable to understand. There are many practitioners who are willing to admit that the radical operation for hernia is justifiable, even when it is not strangulated, and yet they delay sending their patients to surgeons for operation until it is absolutely impossible for them to do an antiseptic operation. The dangers of failures are trebled also by such delays. I have been using Bank's operation; this is really a modification of MacEwen's plan. Where the testicle is diseased and it is removed, a better result is obtained, as the stump of the cord makes a firm barrier against a recurrence.

[to be continued.]

SOCIETY NEWS.

North Texas Medical Association will meet at Gainesville, Texas, December 10, 11 and 12. The following is a preliminary programme:

Section on Practice of Medicine.

"Exophthalmic Goitre," by T. M. Taylor, M. D., Sherman.

"Valvular Lesions of the Heart," by M. C. McBride, M. D., Lebanon.

"Acute Articular Rheumatism." by J. D. Bedford, M. D., Honey Grove.

Section on Obstetrics and Gynæcology.

"Puerperal Fever," by O. H. Caldwell, M.D., Dodds.

"Diagnosis and Treatment of Pelvic Cellulitis," by J. E. Gilcreest, M. D., Gainesville.

"The Most Desirable Position for a Woman in Labor," by Alonzo Sims, M. D., McKinney.

SECTION ON SURGERY.

"Traumatic Cataract," by R. H. Chilton, M. D., Dallas.

"The Indications in the Surgery of the Larynx and Trachea," by E. W. Rush, M. D., Paris.

"Surgical Cases, Including two Cases of Laparotomy," by J. M. Inge, M. D., Denton.

VOLUNTEER PAPERS BY REQUEST.

"A New Artificial Drum Membrane," by H. N. Spencer, M. D., St. Louis.

"Herpes Progenitalis," by G. Frank Lydston, M. D,. Chicago, Ill.

"Extirpation of the Ileo Cæcal Junction," by J. F. Hooks, M. D., Paris.

"Cerebro-Spinal Meningitis," by S. D. Moore, M. D., Van Alstyne.

SELECTIONS.

CAPITAL PUNISHMENT: THE ELECTRIC WIRE *VS.* THE HEMPEN CORD.

The keen edge of the ax, of the days of Bluff King Hal, and before having lapsed into innocuous desuetude by being supplanted by the hempen rope, the latter in these progressive days of science is possibly about to yield in turn to execution by electricity, about which much has been said of late by both the secular and lay press.

From the *Scientific American* of October 19, we make the following extract:

"The law of the State of New York for the execution of criminals by electricity, instead of by the rope, will probably soon be enforced. Judge Day, before whom the evidence for and against the electric system was presented, has decided the new law as constitutional. Mr. Harold Brown is the expert employed by the State to supervise the electric machinery, and he has taken care to recommend the most effective and deadly means for the purpose, namely, the alternating current and the Westinghouse dynamo. This selection has given great offense in certain quarters, as it is supposed the machines named will have a stigma put upon them by reason of this debasing employment. Mr. Brown has been most unmercifully abused by some of the newspapers at the instigation, apparently, of the parties interested in the electrical machines. These persons pretend to be sufferers, both morally and commercially. They affect to be shocked that so pure and innocent an article as the alternating current should be used for such mean purposes; and, moreover, they think it will infallibly hurt their electric business. Their often repeated unlawful killing of innocent people by means of their wires running through the streets touches not their sensibilities, but the momentary pain to be inflicted upon a murderer by a lawful electric execution excites their liveliest sympathies."

There is no question but what the very worst use you can put a man to, is to execute him, whether by hanging, beheading, shooting or by the subtle electric fluid or current.

So well is the fact established that quite a number of foreign countries, noted for their advancement in civilization and enlightenment, and not a few of the sovereign States of this Union have abolished capital punishment. Notably, Holland in 1870; Switzerland in 1874; Portugal, Roumania and Tuscany at various dates; nor has there been an execution in Belgium since 1853; in Finland since 1824; in Prussia, from 1869 to 1878 there were 484 persons sentenced to death, but only one executed; and even in Russia it is retained only for treason and military insubordination. In the United States of America, Michigan abolished capital punishment in 1847; Rhode Island, in 1862; Wisconsin, in 1853; Iowa, in 1872; Maine, in 1876. Apparently strange to some, statistics carefully compiled do not show that the graver or more heinous crimes have by any means increased in these portions of the civilized world. Senator Jessup, of Iowa, writes in 1876, four years after its abolition: "Murder in the first degree is not increased, but for four years decreased" and that "There is more lynch law where the gallows are retained."

The object of capital punishment is two-fold: One to prevent the repetition of the crime by the same individual; the other, to deter others from a like procedure. Occasionally crimes are committed of so heinous a nature, that at first, when it is fresh in mind, there seems no adequate reparation—if even that can be so called, than the idea of the old dispensation of "a life for a life, an eye for an eye, or a tooth for a tooth." Yet in calmer moments, after carefully considering the matter, after mature deliberation and thorough reflection, there are but few men of proper and well balanced mental calibre, who would not either shrink from the duty of execution or prefer at least that some one else should do the job.

In military life discipline must be maintained at all hazards—a too great laxity, or the least excess of leniency in behalf of one, or but few individuals, may involve the fate of hundreds and thousands; and while "short shrift, and prompt execution" may be of the two evils, the least; in "the piping times of peace," should not less harsh measures prevail?

The very idea is appalling, that a man in good health, full of life, at a day and hour, of which he is only too well apprised, must take the fatal step. We all know that death will come—it is inexorable and as irrevocable in its visit as the tax gatherer, yet we have the happy consciousness of not knowing when, nor where. The poor victim in the last stages of consumption, or other inevitably fatal diseases, goes on day by day, hour by hour, in the hope, vain though it be, that it may yet be a little longer—yes, in the distant, ever coming but never arriving to-morrow, as day by day, and hour by hour, he gradually loses his hold on the thread of life, his senses and sensibilities gradually becoming more and more benumbed, by a gradual, progressive anæsthesia, until when the knowledge of certain death is attained he no longer cares.

Far different is the victim of judicial sentence no matter what his crime; he is usually in the full plenitude of his powers, his feeling and sensibilities wrought up to their highest, as day by day he approaches the fatal hour, knowing that there is nothing to intervene but the faint, dim hope of executive clemency, meted out by human hands, his very crime itself adding to the horrors of the dread future. One, brutalized by crime may meet his fate with an apparent stolid indifference; others assume a mad bravado—yet the fact of the given day and hour, coming nearer and nearer, fatal, terrible knowledge, cannot but be horrible.

It must indeed, be a stern sense of duty, a grim observance of an official oath, that will nerve the hand of an executioner, or even enable the judge in his ermine to issue the fatal edict. In official executions are we not assuming the bravery of a flock of sheep, to whom collectively alone is timidity wanting? "Thou shalt do no murder" is a divine edict. "Whoso sheddeth man's blood, by man shall his blood be spilled," the eye for an eye; the life for a life principle of the old dispensation has been set aside by the Son of God. It does not belong to Christianity. Collectively, through their representatives the people enact laws and statutes in regard to capital punishment; collectively, their representatives or agents carry out said laws; but is it any the less murder than when life is taken by an individual without the quasi protection of the people and their representatives at his back? According to law! Whose law! God's or man's? God alone can give life; who else has the right to say when it shall end! For the protection of the community? Is this the only way it can be protected? Can no other means be devised than to meet one crime with another?

That the human mind is beginning to resolve this problem—that we are not altogether satisfied, is clearly evidenced by the gradual but combined effort that has been made for years by which capital punishment can be divested of some of its horrors. The exchange of the gory ax for a rope, which in its turn is about giving place to the lightening's swift flash, the exclusion of the populace from executions in many of our states, making it a matter of business, grim but of dire necessity, and no longer a holiday or festal occasion for the populace, together with the abolition of executions in many localities are unquestionable indications that capital punishment is not of universal necessity. If Michigan, Wisconsin, Rhode Island and Maine can do without it and have no increase of capital crimes, what shall we say of Tennessee, Kentucky, New York and Pennsylvania? This is a grave question and justly entitled to grave consideration. Our National Prison Congress that will meet in Nashville in a few days could not do better than devote its entire session, and for that matter many sessions to the thorough consideration of the subject. It has a direct bearing upon their mission. If it should be decided to abolish it, then our only means of punishment for crimes committed, or prevention of other crimes is by means of penal confinement. Should this be deemed the only means and measures to be resorted to for infractions of the law, then we can consider the most effective and humane methods for its execution.

Yet we cannot hope for an early solution of the question, and as capital punishment will still be the rule and custom in many localities, perhaps we had better "return to our mutton" and again consider the method by which it shall be carried out.

Records of the past show more than one instance in which criminals have been utilized to determine the fatality of certain diseases; the effectiveness of certain remedies. Were not these instances in advance of their time? As hanging or any other mode of death under the law is the very worst possible use you can make of a man, cannot his death be utilized? If he by the heinousness of his crime has sacrificed his right to live, instead of wasting that life by the ax, the cord or the electric spark, can it not be utilized at the hands of science for the benefit of his fellow man? The society for the prevention of cruelty to animals, strenuously objects to the researches of science when made on animals. Would objection also be made to so utilize a condemned malefactor?—Ed. *South Prac.*

REST.

Rest is repose or inaction, of a portion of the organism, during which the waste caused by the wear and tear of work is repaired—repose of a portion of the body, for during life we never find the whole at rest. From the time that the first blood globule begins to oscillate in the rudimentary blood-vessel, until the last sign dies away in the stillness of eternity, there is no such thing as complete rest.

Human beings are so constituted that they cannot exercise all their faculties at one time. They stand on one foot and rest the other; listen with one ear and then the other; look with one eye while the other is loafing; walk until tired, then sit down to rest; and when weary of an easy chair, get up and take a walk to "stretch the limbs." They talk until their tongues are tired, and then stop to think of what they will say next. So they go on throwing one set of wheels out of gear to let them cool off and get oiled up, while they set another portion of the machine running. Even in sleep, in which they come the nearest to complete rest, they are still hard at work. While the brain is standing almost still, the senses locked up, and the muscles relaxed, there are countless thousands of busy laborers at work, oiling up the whole machinery, replacing a worn-out cog here and there among the wheels, and sweeping out the dust and debris worn off by the friction of the machinery of this great manufactory of thoughts, words and deeds. When the day workmen stop the night laborers go on duty, and some of the most skilled artisans are busy during sleep, repairing the tissues.

The work that we do during the day with our heads

and hands, is what we get credit for; but when we rest and sleep, there is an important work going on. That branch of laber performed while we rest, is unseen, and, for that matter, unknown by the majority of us, and hence is often neglected.

We are so constituted that the normal, healthful exercise of our faculties gives pleasure. It is pleasant exercise to eat when one is hungry; to rest when weary; to walk when the brain is fresh and clear. In fact to do anything rational, when thoroughly prepared by previous rest, is agreeable. This is not only true of head and hand work, but also of the natural exercise of the feelings and emotions. When trouble comes, the feelings are wounded, relief is found in complaining and sorrow, and pain is washed away with tears. The Omnipotent set a limit also to human sorrow and suffering. These forms of affliction break over the healthy man or woman and subside after a shower of tears and give place to the sunshine of hope and happiness. It is the weary and worn who cannot rise above their troubles, who go fretting and sighing in search of rest.

A well preserved nervous system can stand an occasional attack of righteous indignation which considerable strong temper or passion may be manifested, if time is taken to fully cool off between the heats. It is the continual fretting, grumbling and growling, without intervals of rest that is wearing and injurious.

The law of harmony between work and rest, when fully obeyed, not only maintains strength, but develops it. All intelligent people know that fact, but many fail to think of it in such a way as to be governed by it. To exercise the muscles of the arms until they are tired and thoroughly rest them, and again exercise and rest, makes them grow stronger and bigger. So with the brain, it becomes stronger under well regulated exercise and rest.

Let us give a moment's attention to the various ways of resting:

First and most important of all, "Nature's sweet restorer, balmy sleep.". Of all the ways of resting this is the most complete and important. The time devoted thereto should not be regulated by hours so much as by the requirements of the individual. Some one, perhaps Franklin, said six hours for a woman, seven for a man and eight for a fool. A little girl friend when told this, said, with much wisdom, "I like the fool's share." While admitting that some sleep too much, the majori ty get less than they need. Sleep should be taken with great regularity, and be free from all disturbance. Sleepless nights are often spent because of being too irritable from fatigue to rest.

One ought to stop work long enough before retiring to cool down to the sleeping point. Hunger, too, will chase away sleep. We would not recommend late suppers, but some easily digested food taken at bedtime when needed, will often secure a sound night's sleep. We are told that "He gives His beloved ones sleep," and we know that there is much truth contained in this passage. The consciousnss of being right and having done well is the best anodyne, the best sleep producer. There is none too much sleep for the righteous, but there is less rest for the wicked who violate the natural laws.

In addition to the good night's sleep, it is a good plan to take a short nap in the middle of the day. It divides the working time, gives the nervous system a fresh hold on life, and enables one to more than make up for the time so occupied. It is well to guard against too long a sleep at such times, since such is apt to produce disagreeable relaxation. There has been much discussion regarding the after-dinner nap, many believe it to be injurious, but it is nevertheless natural and wholesome.

Much can be accomplished in the way of resting, short of sleep. It is very important to economize the opportunities for rest during working hours in the day. The great principle which underlies daily rest is the relieving of one portion of the organization from duty while the others are at work. This can be done to a great extent. When the muscles are tired and worn from mechanical work which requires but little attention of the brain, stop motion and set the brain at work. The laborer can read, think and speak, where his weary limbs are at rest. His brain need not be idle because the hammer or chisel has dropped from his weary hand. On the other hand, a man can work with his hands when his head is tired. The book-keeper whose head is weary with business facts and figures by five o'clock in the afternoon, has considerable time in the evening to sing, play, dance, dig in the garden or black his boots, all or either of which he may do while his head is partially at rest. There is another very important way of obtaining rest mentally, that is by changing from one occupation to another. The dexterous gold beater when he finds one arm getting tired, takes the hammer in the other; and so may the man who hammers thought out of his brain, exercise one set of mental functions while the others rest. One may read until tired and then write; may acquire knowledge until weary and then teach to others.—Ed. *Med. Age.*

SOCIAL EVIL LAWS.

When the Contagious Diseases Acts were suspended as to the compulsory examination of women in 1883, and repealed entirely somewhat later, it was resolved, in accordance with precedence, that they should also be repealed in all those colonies where they had been enforced. This has been done, with we believe one or two exceptions, and sufficient time has elapsed to enable us to compare the results of the working of the Acts with those which have followed their repeal. These latter have been so disastrous in India and in Singapore that men in high positions have felt compelled to speak plainly about it. One of these is Sir Frederick Roberts, who, quoting a statement made to him by the Surgeon-General, remarked that the number of cases of venereal disease in the army had doubled since the repeal of the Acts, and that the nature of the disease had

greatly increased in virulence. It was, he observed, hopeless to expect to put down the evil altogether; all that could be done was to minimise its bad results, and institutes were now being established everywhere for the purpose of trying to keep the soldier out of the way of temptations by providing him with rational amusement and education. His Excellency the Viceroy observed that the government of India was much indebted to the Commander-in-Chief for his weighty and out-spoken statement. Any doubt which might have been felt as to the gravity of the case must have been dispelled by that statement. He advocated the exclusion from camps of women known to be infected, and the provision of hospitals in which they might be adequately treated. He agreed with General Chesney that to say that such steps ought not to be taken was tantamount to claiming for a class of diseases, which are probably attended with more disastrous consequences than any other, both in their immediate and remote effects, an immunity which is not claimed for other kinds of contagious maladies. "I do not believe," he said in conclusion, "that such an immunity will be claimed even by those who are most earnestly desirous of discouraging immorality, and I hope public opinion will support us in the reasonable steps which it will be our duty to take in order to carry out within the limits which I have indicated this most necessary measure."

In Singapore there has been even plainer speaking, its insular position making it peculiarly liable to the importation and propagation of these diseases, and Major McCullum, of the Insular Municipal Commission, described the repeal of the Contagious Diseases Acts as "the most cruel and inhuman step ever taken out here." It was unanimously resolved "that a committee be appointed to collect statistics and information relative to the effects of the repeal of the Contagious Diseases Ordinance, with a review to a report being framed and forwarded to Government, by which clauses may be introduced in the Municipal Amending Ordinance under which the practice of prostitution in Singapore may be regulated." A memorial signed by all the medical practitioners among the civil population—Messrs. Galloway, Jansz, Koehn, Leask and Tripp—has been presented to the Municipal Commission. It points out the great and increasing injury to the public health that has been inflicted by the abolition of the Contagious Diseases Ordinance, and the consequent withdrawal of all checks to the spread of venereal diseases. It also deplores the virulent type of the disease, and predicts results of the most baneful description, to which it is impossible to see any limit. It applauds the proposed interference of the municipality and indicates the special causes which make Singapore exposed to these diseases. These are:

1. The preponderance of males among the Chinese who are without domestic relations.

2. The large shipping trade touching at Singapore, including troopships and men-of-war of various nationalities.

3. The residence of a considerable garrison.

To these were added a female population disproportionately small to an unparalleled extent, and the absence of any proper supervision over or check upon the conditions that are producing this constant inscrease in venereal disease. This memorial, which is well worded throughout, concludes by the statement that in the professional opinion of the memorialists some remedy must be found by those who are responsible for the health of the community. The memorialists also desire to put on record their united protests as professional medical men, responsible to a great extent for the health of the civil population, against the existence of a disgraceful and dangerous state of things, due in a great measure to the enforced withdawal, against the wish of the community, of a legislation that was completely justified by facts, by disease statistics, and by professional opinion and experience. The army, naval and colonial surgeons, though debarred by their official positions from signing the memorial, express perfect approval of it.—*Lancet.*

BACTERIA AND VIRUS.

The connection between bacteria and disease is not explained by the simple fact of the invariable presence of certain microbes in certain diseases, nor by the circumstance that such diseases can be reproduced in animals by inoculations with these microbes. The bacterial theory of disease, like that of fermentation involves a still larger question. It implies that these parasites are capable of converting the media in which they flourish into chemical substances that have a poisonous action on the body, deranging its normal mechanism and thereby producing various groups of symptoms, and even death. It is well known how of late years attention has been gradually becoming fixed upon the chemical aspect of morbid processes, and there has also been a growing belief in the necessary intervention of bacterial "ferments" to produce the alkaloidal substances known as ptomaines, which are derived from the albuminoid elements, and to which so much has been attributed. Dr. Brieger, whose name is largely associated with this subject, reviewed it in its general bearings in an address delivered at the meeting of German naturalists and physicians at Heidelberg. He pointed out (*Berl. Klin. Woch.*, No. 39) how the domain of "infective" disease was widening at the expense of diseases due to nutritional and nervous changes, and proceeded to show that whereas in nature we have everywhere abunant evidence of bacterial chemistry, so in disease analogous effects due to the agency of these minute organisms are to be observed. That the normal vital processes are accompanied by the production of a large number of substances of the aromatic series, such as skatol, indol, carbolic acid, etc., was pointed out by Mischerlich and Hoppe-Seyler; and these products of putrefaction were to be found in the living body or its

excreta in greatest amounts when the vital powers were much impaired. But these substances are of far less importance than the basic products of bacterial life, which Brieger distinguishes into the highly poisonous toxine and non-poisonous ptomaine; the latter, it may be remembered, having been first discovered by Selmi in the cadaver. Toxine (using the term in a generic sense), he showed, is produced even in the primary act of digestion, for peptones injected under the skin of animals often produces symptoms of poisoning; and the action of pepsin or fibrin produces a poison that causes paralysis and even death in some animals. The number of similar products formed in the further course of digestion is very large; the most poisonous of such derivations of albumoid disintegration being neurin (derived from cholin) and methyl-guanidin (from creatin). The poisonous effects of certain articles of diet—all the cases of mussel-poisoning, etc.—are to be atlributed to like principles due to bacterial ferments. Dr. Brieger then showed that up to a certain point various forms of toxine had been obtained from pathogenic bacteria—as the staphylococcus aureus, streptococcus pyogenes, typhoid bacillus (typhotoxin), cholera bacillus, anthrax bacillus, tetanus bacillus, and others, and then referred to the subject of anto intoxication, which has been so well studied by Bouchard and Gautier. It was shown that there was a parallelism between the fermentations ex cited by pathogenic bacteria and those of putrefactive organisms, and that a disease—*e. g.*, typhoid or tetanus —owes its specific characters to the special toxine thereby produced. A further development of the subject lies in the explanation of immunity, and the idea that the products of one kind of microbe may neutralize or destroy the effects of other toxines. Infection thus comes to be really an "intoxication," and the susceptibility to infection to depend on the greater or less tolerance of the body to the poison. The whole facts of protective inoculation accord with this view, so that it may be expected that in time immunity may be obtained through the agency of the ptomaine and toxine of the disease concerned. Then, said Dr. Brieger, will the therapeutic aims of medicine—the establishment of rational and therefore of specific measures of cure—be attained; and this can only be by a close connection being formed between pathology and chemistry.—*Lancet.*

IMPORTANT TO FATHERS WHO SMOKE.

"May I give you my recent experience of tobacco-smoke? It may be a warning to others. I have one child, a little girl not two years old, who was as healthy as the birds when she was born. For more than a year past, ever since she was old enough to be less in the nursery and more with her father and me, she has ailed mysteriously. I could not say she was ill, yet she was hardly ever well. I was in a perpetual state of anxiety about her. The symptoms were absence of appetite, complaints of sickness, stomach and digestion out of order. Last August I took her to a country town where we stayed two months. After the first week, she flourished like a young bay-tree, ate, and drank, and laughed, and played, and slept and kept me forever busy enlarging her garments. I brought her home rosy and robust. In one week all the old symptoms reappeared—loss of appetite, dark lines under the eyes, listless ways, restless nights. Some one suggested that the neighborhood did not suit her; and I was cogitating how to take her away again, when she caught a severe cold and was confined entirely to one room for three weeks. She recovered her health completely. Appetite, spirits, sleep, all returned. It could not be the neighborhood. After her cold, she joined us downstairs again, as usual, two or three times a day. In less than a week, sickness, etc., returned. I was in despair. For nearly three months, I racked my brains about drains, wall-paper, milk, water, sauce-pans, any and everything in vain—the child slowly wasted. The weather was too severe to take her away. In an agony of mind, I noticed one day that, so far from out growing her clothes, as I expected, they were too large for her. The little thing was not eating enough to keep up her strength, and we could not coax her to eat. Yet she was not really ill; she ran about and played in a quiet way and looked fairly well to those who had not seen her most robust. Suddenly my husband was summoned into the country. A week after he went, she began to eat with a relish. In a fortnight, she was her own happy self, full of riotous childish spirits. 'Her father has never seen her like this', I remarked, one evening, when she was particularly merry and mad; and then the truth flashed upon me. It was his tobacco that upset her. He has been away now for a month; and the child's limbs daily get firmer and rounder, and she is the merriest, healthiest little mortal possible. He always smoked after breakfast and after lunch, with her in the room, neither of us dreaming that it was injurious to her. But for his providential absence this time it would never have occurred to me and we might have lost our darling, for she was wasting sadly. It was acting like a slow poison."

It seems to me probable, from the above history, that the child was confined to the nursery for the first few months, and not with the father when he was smoking, and was thus not affected so early as children often are. With rich people, in cities, the "smoking-room" saves children, infants at least, from early poisoning by tobacco-smoke. But that thousands of infants in the homes of the poor in the small crowded houses of the alleys in cities are sufferers from this cause is quite probable. People with consumption and other exhausting diseases are sometimes greatly nauseated by the odor of tobacco brought into the sick room by a physician much given to the use of tobacco. I have several times heard them speak of its being very offensive to them.

As "a word to the wise is sufficient," it seems to me quite proper to call the attention of the profession to this cause of disease, of suffering, and ofttimes of premature death.—*Med. and Surg. Reporter.*

Nerve Exhaustion and Opium.—The revelations following the death of Mr. Wilkie Collins may perhaps tend to increase the pernicious opium habit amongst those who are or who believe themselves to be in need of some extra comfort or support. The accounts given by Mr. Edmund Yates and by Mr. Hall Caine differ in some respects, although they agree as to the relatively large amount of laudanum habitually taken by the deceased litterateur. The former speaks of Collins as a martyr to nerves and gout, and seems to infer that the drug was resorted to for the relief of pain. The latter, in an elaborate report of a conversation held early in 1888, professes to give the novelist's apologetic explanation for his practice. He took laudanum "to stimulate the brain and steady the nerves," and he had been in the habit of taking a wineglassful of laudanum many times a day for fully twenty years. Few things are more lamentable than the obvious cost at which much literary work has been accomplished. De Quincey, Coleridge, Bulwer Lytton and Wilkie Collins stand out as warnings against the folly of over-taxation of mental powers, and as examples of the habitual indulgence in opium. Rosetti, with chloral hydrate, and more recently the actor Damala, with morphine and cocaine, show the same form of weakness in resorting to other reme dial (!) measures. It would be invidious to attempt to enumerate well-known names in literary and artistic circles of men whose work has been carried on beyond reasonable limits under the influence of alcohol. The lesson to be learnt is that brain power has its limitations as much as muscular power. Overwork produces exhaustion in both cases. Physological laws cannot be set at defiance. So far as opium is concerned, it undoubtedly diminishes the susceptibility to external stimuli, and hence may enable a man whose attention is di verted by pain to obtain relief, and perhaps to concentrate his thoughts more fully upon some particular point; but, as a mental "stimulant," its employment is to be deprecated as unsound and dangerous. The constant need engendered by its use does not strengthen the position of a "stimulant," so often erroneously claimed for this drug.—*Lancet.*

A Two-Cent Stamp sent to L. W. Noyes, Chicago, will bring you a package of fine quality blotters. One showing a cunning little cupid dressed only in a travel ing cap and grip, is represented as saying: "I am a runner for La Verne W. Noyes, the well known makers of Dictionary Holders, and am here to point out the fact that a book held with the edge up will become filled with dust, soiled and spoiled unless hugged together with strong springs. The Noyes Holders are the only ones thus closely clasping the book. About 125,000 are now in use, and the later makes are so greatly improved—indeed are so perfect that Mr. Noyes is sad because noth ing more is desired or can be done in this direction.

THE EDITORIAL THREE.

Pencil:

I'm the stub of a Dixon,
Well worn with fixin'
Copy from sun to sun.
I toil with creation,
With ne'er a vacation;
I'm the all important one.

Shears:

With a familiar clatter
I've clipped the best matter
That's come to this office for years,
So when you have read it
Please give me the credit;
I'm the editorial shears.

Paste:

Oh, I'm made of flour
And used every hour.
I'm so very important you see,
That no editor's table
Has ever been able
To prosper at all without me.

All:

Oh, we are three powers,
So important all hours—
We're the editorial three.
No one is inferior
But all are superior
To the editorial "we."

—*From the Western Journalist.*

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service.

ending nov. 9, 1889.

Purviance, George, Surgeon, granted leave of absence for twenty-one days, Nov. 8, 1889.

Austin, H. W., Surgeon, to inspect unserviceable property at St. Louis Marine Hospital, Nov. 4, 1889.

Gassaway, J. M., Surgeon, relieved from duty at New Orleans, La.; to rejoin station at Cairo, Ill., Oct. 23, 1889.

Banks, C. E., Past Assistant Surgeon, granted leave of absence for thirty days, Oct. 28, 1889.

Stoner, J. B.. Assistant-Surgeon, ordered to Vineyard Haven, Mass., for temporary duty, Nov. 6, 1889.

Condict, A. W., Assistant Surgeon, ordered to Cairo, Ill., for temporary duty, Nov. 4, 1889.

Guiteras, G.M., Assistant-Surgeon, ordered to Washington, D. C., for temporary duty, Nov. 8, 1889.

Groenevelt, J. F., Assistant Surgeon, ordered to New York, N.Y., for temporary duty, Nov. 5, 1889.

ORIGINAL ARTICLES.

ASTHMA.

BY E. S. MCKEE, M.D., CINCINNATI.

VARIETIES.

With etiology as the basis, we recognize four varieties, viz., that co-existing with chronic bronchitis, that with emphysema, the uncomplicated asthma, the so-called cardiac asthma and epileptic asthma. Brugelmann,[1] in his excellent writings on this subject, divides the kinds of asthma into:

1. Nasal asthma.
2. Intoxicating asthma.
3. Pharyngo-laryngeal asthma.
4. Bronchial asthma.
5. Neurasthenic asthma.

Epileptic asthma is a variety described by Poulet.[2] He thinks this variety merits the name of epileptic neurosis of the gastro-pulmonary filaments of the vagus nerve. It is characterized by varying paroxysms succeeded by health. In many instances these attacks are preceded by pain in the head, comparable to an epileptic aura. They come on during the day, and vomiting is a frequent symptom. It is the peculiarity of the affection that it is not improved by the routine system of asthmatic treatment, but is successfully combated with that of epilepsy. This guides us to the adoption of a new line of treatment of remarkable efficacy. Thymic asthma, described by Kopp, is considered by him as nothing less than epilepsy, analogous to asthma. He designates it as epileptic asthma; instead of emanating from the gastro-pulmonary filaments of the vagus nerve, it has its seat of origin in the laryngeal filament of the eighth pair of nerves.

Holm[3] describes an inspiratory dyspnœa which has not been previously brought before the profession. One peculiarity is that the paroxysms never come during the night. He considers this disease a neurosis of the phrenic nerve and does not think it the psychical asthma of Becker and Leyden.

Pathology has not been replete with advances during the past year with this intractable trouble. Hypertrophy of certain portions of the Schneiderian membrane is considered a very important discovery made by Camp bell[4]. These hypertrophied points are believed to be potent parts of irritation, and their destruction by means of the galvano-cautery has been followed by excellent results. It is quite possible that in ordinary asthma these points of hypertrophy may exist also in the tracheal and bronchial mucous membrane.

ÆTIOLOGY.

Bosworth[5] considers asthma dependent on: First, a general neurotic condition, a diseased condition of the nasal mucous membrane, some obscure conditions of the atmosphere exciting the paroxysms. From the immediate relief experienced from the use of cocaine in the nose during the exacerbation, this author is led to believe that a large majority of cases of asthma are dependent upon some obscure lesion in the nasal cavity. Also the same conclusion is reached from the cure of so many cases by the removal of the obstructive lesions in the upper air passages. The most intricate, most delicate and most important part of the whole respiratory tract lies in the nose, in that mass of blood vessels which we call the turbinated tissues and which serve to supply the inspired air with moisture. In his opinion, this unquestionably establishes a most intimate connection between the two portions of the respiratory tract. The blood supply in the nose being regulated by the same vaso-motor tract as that which regulates the blood supply of the bronchial tubes, a disturbance in one region is likely to be followed by a disturbance in the other. A diseased condition of the nasal cavity might predispose a neurotic patient to an attack of asthma under favorable atmospheric conditions.

Walsh[6] considers the causes predisposing and exciting, and also that heredity plays an important role in the former. Anything which will produce an irritation of the terminal ends of the respiratory nerves will produce a paroxysm.

At present there are three theories in vogue to explain the causation of the asthmatic paroxysm. The theory of bronchial spasm, the theory of spasm of the diaphragm associated or not with spasms of other ordinary or extraordinary muscles of respiration, and lastly the theory of constriction of the bronchial swellings of an hyperæmic, herpetic or urticaria-like character.

A fourth theory is offered by Bosworth[7] who thinks a large majority if not all cases of asthma are dependent upon some obstructive lesion in the nasal cavity.

One of the noted subjects of idiosyncrasy was Prof. Austin Flint[8] who could not sleep on a feather pillow. He was so susceptible that he was able to detect feathers placed under his pillow by persons whose design was to catch him in his idiosyncrasy.

TREATMENT.

Antipyrine has been quite successful in the hands of Dodge[9]. After a trial of lobelia, grindelia robusta, iodide of potassium and pyrodin, he gave 15 grains every 3 hours during the night, and 5 grains every 3 hours during the day. Apomorphine and antipyrin have been found of much benefit by Bories.[10] In despair he injected $^1/_{12}$ grain apomorphine. Prompt emesis ensued, and the patient sank back on her pillow in a deep sleep from which she did not awaken for four hours. In a subsequent attack she suffered from a severe headache, for which antipyrin was prescribed with much benefit both to the asthma and the headache. Hyoscyamine is recommended by Musser[11], $^1/_{120}$ grain internally every 3 hours; or if a rapid effect is desired, $^1/_{140}$ to $^1/_{120}$ grain

hypodermically for the spasmodic asthma of emphysema.

Brugelmann[12] approves the dictum of Boecker, "In the treatment of asthma the treatment of the whole constitution of the patient is of the greatest importance." He considers iodide of potassium of service in bronchial asthma and of some temporary benefit in the toxic form. Arsenic he thinks of no effect except in the neurasthenic asthma. Amylene hydrate did good service in nasal and pharyngeal, and also in bronchial asthma, although the relief was transient. In his hands cannabis indica had proven a very uncertain drug. Pyrodin was of temporary benefit in a few cases of bronchial asthma, but failed in all other cases especially when severe. Cocaine administered internally and by injections at times gave surprising results in neurasthenic asthma. It frequently fails in other forms and causes alarming symptoms. Chloral is indispensable, as it gives the required rest in all varieties. He finds the induced current acts very strikingly in bronchial asthma; and also sometimes in the toxic form, but in the other varieties it is inactive. The constant current he has found without result. One of the oldest and most valuable agents as a palliative is the smoke of some burning stramonium. This is especially affective in toxic and bronchial asthma, and to a less degree in the neurasthenic variety; in the other forms it is useless.

Ferrand,[13] just at the onset of the attack, gives a warm mustard pediluvium; then burns some nitre paper and has the patient smoke a Trousseau cigarette. This is followed by a hypodermic of chlorohydrate of morphia, 1 or 2 centigrammes with or without ether. Inhalation of chloroform may be tried. If the patient can take it, he gives about 5 grammes of wine of ipecac, after the manner of Graves. When the crisis has commenced he has the patient place his hands in a jar of hot water. Then he has the sufferer inhale a little ammonia or aromatic essence, pure or mixed with some chloroform. The following mixture must be taken every 5 or 10 minutes: Aqua laurocerasi, 6 grammes, laudanum de Rousseau, 4 grammes. Take 5 drops at a time in some infusion of orange flower to the extent of 25 or 30 drops. This treatment can be completed by a hypodermic of morphia and atropia. He gives something to assist expectoration. During the period of freedom from the attack the patient must take before dinner and supper 25 grains of iodide of potassium with some expectorant. Morning and evening he gives a Kermes pastille with a pill composed of ext. stramonium and valerianate of zinc, of each 1½ grains. Every two days the patient takes a physic, composed of senna and cream of tartar, and the other two days the hot mustard foot bath. In cardiac asthma, with hypertrophy complicated with rheumatism, Ferrand gives the following prescription each morning when the patient is having no attack; 25 grains of iodide of sodium in an expectorant infusion and in the evening before the repast he gives the bromide of sodium and syrup of aconite in an infusion of hops. In the evening on retiring, the patient takes 15 to 20 drops of etherized tincture of digitalis and as much lobelia. Two or three times a day in cases of an attack he has the patient inhale 4 or 5 grammes of pyrodin, which is placed on a plate near him.

Lepine[14] says the inhalation of carbonic acid gas by Weill has shown itself, even to the present time, a useful and innocent remedy in certain cases of dyspnœa, especially those of the tubercular variety. Its action on the dyspnœa and on the spasms of coughing is very great; the relief continues sometimes for several hours and even days. It will remain a happy and easy application of the beautiful discovery of Brown-Sequard.

Chaban[15] has made a large number of experiments with inhalations of carbonic acid gas and invented a number of instruments used with this treatment. He considers carbonic acid inhalations superior to any other empirical treatment, for example, morphine, because it is permanent and the effects of intoxication are not risked. In reality the carbonic acid is absorbed in very little quantity. Its direct action is inhibitory on the larynx and not indirect through the circulation.

Musser[16] recommends hyosciamus, gr. $^1/_{120}$ internally every three hours. If a rapid effect is desired, gr. $^1/_{140}$ to $^1/_{120}$ hypodermically for the spasmodic asthma of emphysema. Nux vomica he gives as a respiratory stimulant, and terebene or oil of eucalyptus for the accompanying bronchitis, diminishing the hyosciamus as the other drugs are increased.

Gaul[17] has had beneficial results from the use of the wood known as Spanish Needle-bidens bipinnata.

Lewis[18] and many others have borne testimony to the benefit of smoky atmosphere. The immunity of certain patients in London and other large cities has long been noticed.

A case of poisoning by Himrod's powder is reported by Thorpe[19]. Williams[20] highly favors the use of iodide of potassium. He thinks the effect is due to the action of the iodine in reducing the enlarged bronchial glands. The indications for prescribing this remedy are: 1. The absence of catarrh. 2. The well marked presence of the neurotic element. 3. The detection of dulness along the right or left edge of the first portion of the sternum, or in one or both interscapular regions showing enlargement of the bronchial glands. He combines arsenic with the iodide of potassium, deriving much benefit from the mixture. The application of rarified or compressed air in bronchial asthma has been used to considerable extent by Williams, and almost invariably with excellent results. The great relief comes from the reduction of the chest circumference, reappearance of hepatic and cardiac dulness, by the great freedom of respiration, as well as by many other minor improvements. Contra-indications are: Distinct valvular disease of the heart, extensive cardiac dilatation, fatty degeneration of the heart or atheromatous degeneration of the arteries.

Poulet[21] has obtained marvellous effects in his so-called epileptic asthma from bromide of potassium in 6

gramme doses daily, in conjunction with 6 milligrammes of picrotoxine and an equal amount of soda. The paroxysms were almost entirely suppressed at one stroke as but a single attack occurred at the end of 10 days.

Sawisza,[22] after having tried a legion of highly recommended anti-asthmatic means, including iodine, tincture of lobelia, nitrate of amyl, nitro-glycerine, paraldehyde, aspido-spermin, pyrodin, etc., has found that the hypodermic injection of morphine in moderate doses, about $\frac{1}{8}$ grain, renders the best service. Nitro-glycerine[23], one drop doses of 1% solution, promptly relieves the asthmatic seizures. It will remove the helmet-like headache in one minute. Inhalation of oxygen and cocaine by insufflation, according to this authority, is highly beneficial.

Bosworth[24] emphasizes the fact that local treatment of the internal disease affords by far the most satisfactory method of controlling this distressing and hitherto uncontrollable disease. He found this particularly true in cases under 20 years of age.

Weill[25] uses carbonic acid gas to relieve dyspnœa. He had the patient inhale the gas pure from 5 to 10 minutes at a time, using 2 to 5 litres once or twice a day. This treatment was suggested to him by observing the experiments of Brown Sequard on the inhibitory effect of a current of carbonic acid gas on the larynx. In using the gas there seems to be an abolition of the reflex sensibility of the pharynx and larynx. The gas appears to cut the paroxysms short when given during the attacks and the palpitations which followed were much diminished, the cough stopped and the respiration fell to half its previous rate, while the patient at once experienced a feeling of relief. If used between the attacks it has the effect of preventing them and diminishing their frequency.

Linossier[26] has confirmed the experiments of Weill. He found the dyspnœa and cough both quickly relieved by the patient simply inhaling the gas given off from a glass containing a solution of bicarbonate of soda and tartaric acid in effervescence.

Ellis[27] has found quebracho (aspidosperma quebracho) a good remedy for dyspnœa. He had not observed the disagreeable effects as headache, partial unconsciousness, dizziness and partial salivation, reported by some. He gives a teaspoonful of the fluid extract of quebracho repeated every hour as required. The second or third dose usually produces the required effect. He accepts as plausible the hypothesis of Penzoldt that this remedy enables the blood to take up more acid than usual and thus to satiate the intense demand.

Chabamie[28] describes a simple method of manufacturing this carbonic acid gas. Into a bottle closed with a rubber stopper he passes a tube; in the bottle is placed 12 grammes of tartaric acid and 15 grammes of bicarbonate of soda. The patient places the tube in his mouth and the gas is very easily inhaled on account of the force of expansion. This can also be done with a common glass.

[1]Deutsch. Med. Zeitung.
[2]Jour. de Medicine de Paris.
[3]Nordsk Magazin for Laegvidenskab.
[4]Canada Med. Record.
[5]Am. Jour. Med. Sci.
[6]Chicago Med. Times.
[7]Am. Jour. Med. Sci.
[8]Pacific Med. Rec.
[9]N. Y. Med. Jour.
[10]So. Cal. Practitioner.
[11]Philadelphia Med. Times.
[12]Deutsch. Med. Zeitung.
[13]Jour. de Med. de Chirurgie.
[14]Ther. Medical.
[15]Jour. de Med. de Chirurg.
[16]Philadelphia Med. Times.
[17]Med. Summary.
[18]Med. World.
[19]London Lancet.
[20]Am. Jour. Med. Sci.
[21]Jour. de Med. de Paris.
[22]Gazetta Laverska.
[23]Ed. Med. Register.
[24]Am. Jour. Med. Sci.
[25]La France Medical
[26]Lyon Medical.
[27]Lyon Medical.
[28]Therapeutic Gazette.

REPORT ON PROGRESS.

SURGERY.

BY H. G. HARVEY, M D., ST. LOUIS.

Ether Irrigations in Strangulated Hernia.

Dr. Anna J. Brustein (Moscow), quoted by *Annals of Surgery*, August 1889, from *Novosti Terapii*, November 1888, reports a case of a woman with an incarcerated umbilical hernia of the size of a man's fist, in whom, after ordinary methods for reduction had failed, she resorted to irrigation with a small jet of ether at the same time continuing taxis. In 3 or 4 minutes the reduction was effected with striking ease. Dr. Brustein believes that the main action of local etherization should be attributed to a great rapid contraction of the intestinal coat, as well as of volume of the hernial gaseous contents, which is caused by the evaporation of ether, accompanied by a great loss of heat.

Dr. Ivan N. Drakin (Kharkov) in the *Proceedings of the Kharkov Medical Society*, quoted by the same journal, eulogizes ether irrigations as an excellent means for reduction of strangulated hernia. He simply pours a teaspoonful of ether over the hernial tumor every quarter or half hour, keeping it covered with compresses during the intervals. As a rule, after 3 or 4 teaspoonfuls the intestinal loop slips down into the cavity by itself; in some cases, however light pressure should be applied.

In the case of incarcerated scrotal hernia, it is advisable to irrigate with a mixture of ether (20 parts) and hyoscyamus oil (4 parts). When applied sufficiently early, the method is said to give most brilliant results.

Operative Treatment of Tubercular Peritonitis.

F. Spaeth (Hamburg), terminates his paper with the following conclusions:

1. In primary tuberculosis of the peritoneum without implication of other organs, laparotomy may act as a curative agent and is to be recommended.

2. In tuberculosis of the peritonæum where the female genitals are involved in the process, the operative treatment has not given any satisfactory results.

3. In tuberculosis of the peritoneum due to a tubercular enteritis, the operative treatment is only pallative.

4. In genital tuberculosis unaccompanied by peritoneal tuberculosis, early radical operation is to be urged. The indications for operation are not readily determined owing to the impossibility of making a bacteriological diagnosis before laparotomy.

5. Primary tubercular peritonitis is a much rarer disease than has heretofore been thought. Hence care should be exercised in making a diagnosis, and a bacteriological examination of every case should be made.—*Annals of Surgery*, Aug. 1889.

Green Soap in Caries.

Dr. Kollmann, (*Munch. Medic. Woch.*) has obtained excellent results in cases of caries from the use of green soap, which he rubs in with a sponge or the palm of the hand over the neck, back and the posterior surface of the thighs. These applications are made two or three times a week, best at night, the quantity of soap varying from 25 to 40 grams. The soap is left on for half an hour and is then washed off with warm water and the patient sent to bed. Except in cases of chronic periostitis or caries of the pelvis, spine or lower extremities, the patient is allowed to follow his occupation during the day. Change of diet and cod liver oil are not essential during the time of treatment, although they may hasten recovery. The results of this treatment were astonishingly good, the average duration being 4½ months. The author thinks that in caries there is an excessive quantity of lactic acid in the blood and tissues, which is neutralized by the alkaline property of the soap.—*Intern'l. Jour. of Surg.*, June, 1889.

Ether Versus Chloroform.

In the Address in Surgery, delivered before the British Medical Society, by T. Pridgin Teale, M.A., F.R.C.S , F.R.S., and published in the *Med. Rec.*, August 31.

This subject is discussed: Ether can be given "*tute cito et jucunde,*" and for safety to the patient, comfort and convenience to the operator, is immeasurably better than chloroform. The disadvantages of ether administered by pouring lavishly into a conically folded towel are great and obvious. A bad etherist will cause fear, coughing, sense of suffocation, excitement, struggling, blueness of lips, mucous rattling in the trachea and bronchi; besides taking 5 to 10 minutes in getting the patient under the anœsthetic, using twice or thrice the necessary amount of ether, keeping the patient overcharged with ether, in a state of profound stertor, and occasionally setting up a dangerous bronchitis.

As thus given, ether is brought down nearly to a level with chloroform as to safety, and below it as to comfort to the patient. According to the author Clover's inhaler is unapproached by any other method of giving ether that has come into use. With it a good etherist will, in nine cases out of ten, have his patient ready for operation in two or three minutes, and not unfrequently in a minute and a half; without a struggle, without coughing, often without even a transient sense of suffocation, with the expenditure of about half an ounce of ether and will need but about one ounce for each succeeding fifteen minutes. All this too, without fear of danger at the time, or succeeding bronchitis. The advantages to the operator need not be mentioned. The economy of time is quite an advantage. Another advantage claimed for ether over chloroform is that the return of consciousness to pain lags behind the return of mental perception; hence anæsthesia can easily be re-established without interrupting the operation.

The author concludes: "Let any one who is not yet a convert to ether, or who, having used ether, is wavering in his allegiance to it, ask himself these questions: Have I myself studied the details of successful etherization? Am I using the best form of inhaler? Have I taken pains to have those who act for me properly taught and trained? If not, let him ask himself one more question —have I done my duty?"

Those who use ether in a case certainly realize that the above picture is not overdrawn. If a good etherist with a Clover's inhaler can do what is claimed by the author, every surgeon should have one. However, the author remarks "it is not every one who knows, and there are some who are incapable of learning how to administer ether, even with Clover's inhaler."

Fatal Result of a Wasp Sting.

Alex. D. H. Leadman, L.R.C.P.E., etc., reports this case in *Brit. Med. Review*, September 21, 1889:

A farm laborer, æt. 28 was stung by a wasp on right side of neck, August 29. At that time he had a boil under the left ear. He was a healthy looking man but suffered much from constipation and belonged to a family among whom boils and abscesses were very common—thus showing a natural tendency to suppurative mischief. Late in the evening of the twenty-ninth both sides of neck began to swell and the condition was so serious on the thirty-first that the reporter was called in who found the neck, cheek, lower jaw and even the pec-

toral muscles attacked with acute cellulitis. Notwithstanding treatment septicæmia supervened and death occurred on the ninth day from the sting. No abscess formed but, the cervical tissue was very much indurated. August 29 was a very hot day, and, following as it did, a period of rainy weather, the conditions were favorable to rapid decomposition of dead organic matter and it is highly probable the wasp had been feeding on some pustrescent material previous to the stinging.

Pregnancy and Operative Surgery—Their Mutual Relations.

S. C. Gordon, M.D., *Bost. Med. and Surg. Jour.*, Oct. 17, 1889. Before the days of anæsthetics, all surgical operations, even the minor ones, on the pregnant woman were postponed if possible. This caution doubtless arose from the fear that the nerve centers would induce abortion. That no such cause of fear should now exist is shown by the numerous operations reported in current medical literature. Still there remains the danger from septicæmia, which is a powerful cause of abortion or premature labor.

Ovariotomy and even trachelorraphy are done with impunity. The writer gives a history of a woman at second month of gestation. Pelvic pain, particularly to the right, was frequent and severe; examination showed in right side of pelvis a small somewhat elastic tumor. In the median line extending slightly above the pubes was a tumor much resembling in shape and size the pregnant uterus at end of the second month of gestation although much harder than would be expected. A fibroid tumor was suspected; the symptoms become so urgent that surgical interference was deemed advisable. A fibroid tumor with sessile attachment to middle of front of uterus was found pressing the uterus to the right. The tumor was enucleated leaving the uterine wall very thin from absorption of its muscular coat. The uterus returned to its normal place; recovery rapid and without complication, and the woman was delivered at full term of a healthy child after a long and tedious labor. The uterine contractions were frequent and severe during the last two hours of labor but the integrity of the uterine wall was not impaired.

Chloroform Accidents.

Prof. Dastre (*La Semaine Medicale*, August 28, 1889) classifies the causes of fatal accidents as follows:

1. Primary syncope, respiratory or cardiac, death resulting from the first inhalations and due to reflex cardiac syncope or to reflex apnœa. 2. Secondary or bulbar syncope, narcotism being more advanced. 3. Toxic apnœa, where the agent has been given too freely or too long, the anatomical elements, particularly the nerve elements, having lost their vitality.

The real danger is from the effects produced upon the heart. In such cases we are practically without resource, while in case of respiratory inefficiency we have a remedy in artificial respiration. Contrary to the general opinion the arrest of heart's action in four cases out of every five is a phenomenon of excitation and not of paralysis or paresis.

Inasmuch as in the majority of cases it is the stimulation of the inhibitory cardiac apparatus that is concerned, section of the vagi would constitute the theoretical remedy. The practical remedy is the use of atropine, before administering chloroform, which destroys the excitability of the cardiac filaments as well as of their bulbar nucleus. But owing to the excitative tendencies of atropine it should be conjoined with morphine. The dog is infinitely more subject to chloroform accidents than is man. In the laboratory of Sorbonne one dog in three was lost by accident before the use of the above mixed method. During the last ten years all the dogs have been anæsthetized by the mixed method and in hundreds of cases of narcosis there has not been one death. This mixed method has also been used in human surgery, particularly by M. Aubert and his colleagues of Lyons, who use the following formula:

Morph. Muriat., - -	gm., .100.
Atropiæ Sulphat., - -	gm., .005.
Aquæ Destillat., - -	gm., 10.000.

From fifteen to thirty minutes before the operation $1\frac{1}{2}$ c.c. of this solution is injected hypodermically. M. Aubert said (Soc. Biol., April 21, 1883): "I know of nothing more desirable or practicable. The advantages are the following: 1, safety; 2, the great rapidity with which sleep is produced; 3, the absolute repose of the patient; 4, the quick return of consciousness; 5, the absence of unpleasant sequelæ, such as vomiting. Some of my colleagues have at my suggestion employed the method, and M. Goyet particularly recommends it in ophthalmological surgery." The number of instances of its employment now (1889) mounts up into the thousands and without the occurrence of a single accident.—*Med. Progress*, October 19, 1889.

Sulfonal in Painful Muscular Spasms after Fracture.

Dr. Edmund Andrews, of Chicago, says that with the ordinary anodynes and antispasmodics the muscular spasms following fractures are not thoroughly controlled. Although the patient under the influence of morphine is quiet when awake he is aroused from sleep by repeated painful contractions for days. In three such cases he gave sulfonal in 15 gr. doses repeated if necessary in four to six hours. In each the spasmodic twitches were completely stopped and wonderful relief afforded. He thinks sulfonal would be a valuable adjuvant to extension in hip-joint disease, and that numerous other varieties of reflex spasm may be equally benefited by it.—*Med. Prog.*, October 19, 1889.

Surgical Treatment of Erysipelas in Children.

Dr. A. Seibert (*N. Y. Med. Jour.*, October 19, 1889),

reports three cases treated by the Reidel-Kraske method:

Case 1.—Girl, æt. 5 years, having varicella scratched her legs, making open sores, and in one of these on the calf of left leg erysipelas commenced with a severe chill and nausea; temp., 104°-105° F.; inflammation spreading rapidly downward and upward. The child was first seen eighteen hours after the chill and the Reidel-Kraske method was proposed, but was refused on account of the anæsthetic. Next day the erysipelas had extended an inch above the knee and to the ankle-joint. The operation was then done with a new vaccination lancet without the anæsthetic. "After carefully cleaning the whole thigh with soap, water, ether and a 5% solution of carbolic acid, and covering the erysipelatous region with a carbolized towel, I firmly grasped the leg, and with long strokes of the harrow managed to open the skin around the thigh to the width of about an inch and about an inch and a half away from the erysipelas. The longitudinal scratches (which were deep enough to draw blood) were carefully but quickly crossed diagonally with manifold strokes of the harrow, so as to be sure that all of the surface operated upon was opened. A solution of corrosive sublimate (1-2000) was then rubbed into the wound, a layer of absorbente cotton applied and fastened with gauze bandages. The dressing was moistened freely with the same solution every 15 minutes." The operation required about two minutes. The temperature was 105°; all food had been vomited for two days; wakefulness and delirium most of the previous night. The "fence" was not made around the lower extremity of the inflamed region. The operation was done at 11 p. m. Next day temperature 100.5° (rectal), aud the child was sitting up in bed smiling. The skin disappeared under the lower border of dressing in a red and swollen condition while above the dressing it was white and cool. Temperature did not rise again and the functions of the body were normal. Subsidence of the severe symptoms set in about six hours after the operation.

Success in the other two cases was equally as good.

The object of this method is to bring Fehleisen's coccus of erysipelas in direct contact with the germicidal fluids.

Washing out the Bladder Without a Catheter in Cases of Painful Cysts by Means of Simple Atmospheric Pressure.

M. Lauvaux (Paris), *London Med. Rec.*, April, 1889. A reservoir containing the fluid is placed three or four feet above the recumbent patient; a rubber tube with a perforated nozzle syphons the liquid into the orifice of the urethra. The liquid fills the urethra and then passes easily into the bladder. As soon as there is a desire to micturate the nozzle is withdrawn and the stream passes out naturally. The injection is repeated as often as may be judged necessary—usually four or five times. Solutions of cocaine and boric acid are chiefly used. "For washing out the urethra an elastic catheter, with the ends bulbous and the openings allowing of a reversed current, was used, so as to obtain a constant irrigation by antiseptic solutions several times in the day." A number of cases of painful cystitis are detailed and the conclusions are that the method has many advantages and that the anæsthetic action of cocaine is a great assistance toward cure. Where there is much loss of substance in the urethra difficulties arise but the method of injection helps to discover and locate fistulæ.

Anæsthesia of the mucous membrane of the bladder can be produced in a few minutes with the cocaine solution and then the use of aseptic injections will cure cases of cystitis rapidly.—*Annals of Surgery*, September, 1889.

The Surgical Treatment of Backward Displacements of the Uterus.

Charles P. Strong, M.D., *Boston Med. and Surg. Jour.*, October 17, 1889. Dr. Strong writes of the treatment of backward displaced uteri, adherent and non-adherent. After a lengthy discussion of the subject he gives the following

Summary.—From the results of my own operating I have drawn for my guidance the following rules:

Be sure that the displacement is the cause of the symptoms. Never resort to operative measures without first exhausting all forms of non-surgical treatment in so far as they may be applicable to the case under consideration. An adhesive backward displacement of the uterus demands for its cure, first, separation of its adhesions; second, anterior fixation. Separation may be accomplished, first, by forcible divulsion or cutting. The advantages of the first method are that in suitable cases the patient is exposed to few dangers beyond a simple traumatic peritoneal inflammation. The advantages of the second are that it supplements the first; assuming greater risks it strives for greater successes; the adhesions being dealt with more openly, any accident that may arise is more easily remedied; it can be employed in cases to which the first is inapplicable. It superadds, however, the dangers of a laparotomy.

A backward displacement which is free originally or which has been freed from its adhesions may be secured forward, first, by shortening of the round ligaments, either by the Alexander-Adams or Wiley method; second, by fixation of the uterus and the peritoneum of the anterior abdominal wall, or to that of the anterior pelvic floor (Schücking's method).

Of the four operations, the only one not involving interference with the peritoneum is the Alexander-Adams. I believe that it should be selected, from my own experience of its successful results. I make an exception, that if for any other reason the abdomen has been opened, Wiley's operation may perhaps prove its equal. These round ligament operations leave the uterus in a practically normal position, without undue tension on tubes, intestines, or blood-vessels. There is no danger of fæcal fistulæ or ulceration of the intestines; no n

terference with subsequent pregnancies. Permanent successful results do not depend upon adhesions or suspensory stitches, and the uterus is left movable, not fixed.

TRANSLATIONS.

FROM THE FRENCH.

By Dr. Joseph Grindon.

Transmission of Tuberculosis From Mother to Fœtus.

M. Sanchez-Toledo, in the *Archives de Med. Exper. et l'Anat. Path.*, gives the results of his experiments to determine the method by which tuberculosis is transmitted from mother to fœtus.

Baumgarten, Landouzy and Martin believe that in tuberculosis as in anthrax, the specific bacillus passes from the mother to the fœtus through the placenta. As post-mortems exhibiting congenital tuberculosis are very rare, Baumgarten admits that the bacilli which have entered the fœtus through the placenta there remain for a while latent and reveal their presence by specific lesions only some time after birth.

And yet various observers, among whom are Grancher, Strauss, Nocard, Leyden, have failed to see any evidence of this method of transmission. They inoculated guinea pigs with bits of tissue taken from fœtuses born of tuberculous women, without reproducing the disease.

Sanchez-Toledo has again taken up these experiments. He injects pure cultures of Koch's bacillus into the jugulars of pregnant cobayes. They die either before or soon after delivery.

He then examines the fœtus' liver and spleen, but has never found bacilli in them. He has sown blood from the heart, the liver and the spleen of such a fœtus in various culture media without ever obtaining cultures. He also inoculated healthy animals with fragments of the liver and spleen without ever reproducing tuberculosis.

He also employed various other methods to produce tuberculosis in the pregnant female animals, such as intra-pleural and subcutaneous injections, but failed equally in thus communicating virulence to the viscera of the fœtus. These observations covered 35 females and 65 fœtuses born of these females. It would thus seem that the bacillus tuberculosis does not pass from the mother to the fœtus.

This conclusion is of the first importance. According to it, a tuberculous mother does not give birth to a tuberculous child. She would infect it only after its birth. The practical lesson to be drawn is that by separating a child immediately after its birth from its tuberculous mother, we may preserve it from tuberculosis.

How can we explain the passage through the placenta of the bacillus anthracis, when the same way is barred to the bacillus tuberculosis. It might be due to the fact that the first travels along blood vessels, while the second is but rarely found in them, but oftener fregnents in the lymphatic channels.—Paul Gallois, in *Le Bulletin Med.*

Vehicles for Antipyrin.

The *Lyon Medical* says that antipyrin can be taken in coffee, which disguises its taste.

It also recommends vichy, sweetened and colored with raspberry syrup, as a vehicle for the same drug.

Antipyrin Poisoning.

L'Union Medicale quotes from the *Therap. Monatsh.* a case of antipyrin poisoning. The subject was a strong and healthy young woman, æt. 22 years, who took 15 grs. of antipyrin for violent headaches. Soon after taking the drug she was seized with burning sensations about the stomach, œsophagus and mouth, with general distress and dyspnœa. The face was red and œdematous, the eyelids and lips tumefied, and there was an abundant secretion both of tears and of saliva.

During the next few days the swelling about the face continued with tenderness on pressure over the parotid and submaxillary glands.

This was evidently a case of idiosyncrasy, as equal doses from the same sample were followed by no unusual effects when administered to other individuals.

Pathogenic Properties of Microbes of Malignant Growths.

M. Verneuil called the attention of the Academie des Sciences to the recent discussions about the alleged microbian nature of cancers, sarcomata, epitheliomata and other malignant tumors.

While the speaker could not regard the micro-organisms found within such growths as their cause, he at the same time believed them to be well worthy of attention, holding:

1. That they modify the nutrition of neoplasmata, accelerate their course, stimulate cellular proliferation, and are the principal agents concerned in ulceration and breaking down, the causation of which latter phenomena has, until now, remained obscure.

2. That they, of themselves, possess certain pathogenic properties, which, coming into play in certain cases, produce systemic sepsis.

He then related, in confirmation of his views, two cases of removal of malignant tumors which had softened in places, the superimposed skin remaining sound. The substance of these growths was torn on removing them so that some of the fluid broken-down material came in contact with fresh surfaces, and was suffered to remain for some minutes. Notwithstanding the fact

that every precaution was used, such as careful washing out of the wounds before closure, drainage and antiseptic dressing, these operations were followed by septicæmia, which in one case proved fatal. The fluid from the tumors presented rod and coccus forms in abundance.

The attendant circumstances in these cases (condition of patients, antisepsis, salubrity of wards) were so good that M. Verneuil is driven to the conclusion that the septicæmia was due to the prolonged contact of the fluid furnished by the softening of the growths with the cut surfaces during the operations.

The dangers especially appertaining to the removal of growths in process of softening may be avoided by making use of the following simple precautions:

A. The softening of a growth being recognized or even suspected, the growth should be removed whole without cutting into or tearing it.

B. Should it, however, happen that the centers of softening, being in some way opened into, spill their contents into the wound, the latter should be carefully and copiously irrigated with a strong antiseptic solution, this measure being repeated several times, if necessary, during the extirpation, and it is hardly necessary to add, at its conclusion.

C. If, in spite of all, there be reason to fear that inoculation of the wound with bacteria or their products has taken place, immediate closure should be abandoned in favor of an open antiseptic dressing.—*Le Bulletin Medical.*

Disinfection of Typhoid Stools.

The *Lyon Medical* gives the results of a number of exhaustive experiments conducted by MM. Richard and Chantemesse, with a view to determining the efficacy of various agents in disinfecting th stools of typhoid and dysenteric patients. The following were used:

Sublimate, 1 per 1000.

Sublimate, 1 and HCl, 5 per 1000.

Calcium chloride, 5%.

Calcium chloride, 20%. (lime water).

These were added to separate flasks containing contaminated fæces, in the proportion of 2 volumes to 100, and the flasks well shaken. These were examined for bacteria at the end of a half hour, an hour, two hours and a half and forty-eight hours. Each investigation showed living bacteria, even after forty eight hours, in the flasks treated with the first three solutions, while those to which lime water had been added, were sterilized at the end of the first half hour.

The above shows that lime in the proportion of 4 to 1000 will sterilize stools when the same result can not be obtained by sublimate, 1 in 50,000, either pure or with the addition of hydrochloric acid, or by chloride of lime, 1 to 1000.

We have here at hand an invaluable agent which recommends itself by its cheapness, its easy application and its efficacy. It would be well to use a larger proportion in actual practice than that mentioned above, 2 parts lime water to 100 parts fæces, as a part of the lime will be neutralized by uniting with acids and thus displacing ammonia. If the presence of the latter be abundantly evident to the nostrils, we may know that this reaction is taking place, and increase the proportion of lime water to make up for the loss.

Pure lime will not answer the same purpose. The value of the agent here recommended depends upon its ready miscibility. The contents of the vault should be several times stirred with a pole after adding the disinfectant.

Etiology and Treatment of Acne.

M. Barthelemy, in the *Bulletin Medical* for September 1, sulmits the following propositions:

1. The presence of acne on the face or breast should at once suggest to the physician, (*a*) the presence of dyspepsia with dilatation of the stomach and the usual concomitant symptoms; (*b*) that it is only by treating the digestive trouble that he can master the cutaneous affection, and perchance be so fortunate as to prevent its disheartening relapses.

2. The role of dyspepsia, however, is only to prepare the soil on which is to be sown the acnogenic germ, the latter finding a really favorable medium in seborrhœa alone. This affection is the direct consequence of defective digestion, consequent fermentation and the elimination by the glands of the skin of the toxic or useless products which have been absorbed into the circulation together with the useful products of digestion, (leucomaines, volatile fatty acids, etc.) This propositions may be summed up as follows:

No acne without a previous seborrhœa.

3. The acne, which next appears, is the result of the inoculation of the seborrhœic skin with germs reaching it from without. One can easily understand how an oily seborrhœic skin would catch floating germs as it does dust.

4. Acne is contagious and anto-inoculable, providing there be a pre-existent seborrhœa. This would place it alongside of furunculosis, impetigo, ecthyma, etc. The degree and extent of the acne will be proportionate to that of the seborrhœa and to the condition and resistance of the organism.

5. The acne germ seems to be constantly present in the skin of one once having had acne. Remaining for a long time latent they seem to await but new favorable conditions to declare their presence, such conditions being furnished by errors of diet, the ingestion of certain medicaments (iodine, etc.), or any debilitating cause.

6. The treatment should be determined by the abovementioned etiology, and should consist in local and gastro-intestinal antisepsis; the first for the destruction of acne germs, and the second with a view to decreasing susceptibility. The ordinary surgical procedures would still be called for in some cases.

M. Barthelemy believes that there is practically but

one form of gastric trouble holding an etiological relation to acne, *i. e*, dilatation *clapotage* was found 165 times among 169 cases. (This term, perhaps best translated splashing, is used by the French to designate the peculiar sound produced by the succession of liquid in a cavity containing air or gas, and may be compared to that heard when small waves break on a pebbly beach. It is looked upon as a pathognomic physical sign of dilatation of the stomach). Among patients presenting other dermatoses it was found in a far different ratio. Thus, 8 times among 27 cases of psoriasis; 16 times among 59 of eczema; and so with urticaria purpura, the exudatives, erythemas, etc. This would show that the latter affections are related to a different gastric trouble.

While thus one may almost say that there is no acne without dilatation, on the other hand there are many cases of dilatation without acne. In these cases, however, we can find seborrhœa as the initial cutaneous disturbance and the immediate consequence of gastric dilatation.

Many have seborrhœa without acne, but none have acne without seborrhœa, and none have seborrhœa without gastric disturbance and few without dilatation. Cultivation from acne pustules has shown all the ordinary innocuous and pyogenic bacteria of the skin, with the predominance of staphylococcus p. albus.

The writer believes that there is a pure acne found in those never before having had the disease, the lesions being miliary *papules*, and that it is only after the ordinary pyogenic forms have become associated with the acnogenic germ that we have the formation of pustules. Here we have a *bacterian partnership*.

Elastic Tissue.—Dr. Galin has made some experiments in the laboratory of Professor W. W. Podvysotsky, in Kieff, on elastic fibres, which led him to the conclusion that the elastic tissue can be saturated by a foreign substance circulating in the blood and tissues. This occurs not only when the whole system is saturated with the substance and the organs of excretion are inactive, but also when such saturation does not take place and the kidneys are acting normally. These experiments, as well as those of Blashko, throw a new light on the physiological importance of the elastic tissue, and suggest that it serves as a kind of depot for the storage of septic and foreign substances, especially when their free excretion—by the kidneys, for instance—is in any way disturbed.—*Lancet.*

In answer to numerous inquiries, we take pleasure in announcing that the new edition of Remington's Practice of Pharmacy will be ready for delivery November 5. More than 200 pages and 140 new illustrations have been added, embracing over 100 autograph prescriptions on enamelled paper, and many other new features.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,

Editor.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

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SATURDAY, NOVEMBER 30, 1889.

Relations Between Pregnancy and Some Affections of the Nervous System.

M. Chembrelent, in the *Journal de Medicine de Bourdeaux* analyzes a number of cases occurring in his practice, showing relations which have as yet received but little attention from the profession.

The first was a case in which a woman was attacked with paraplegia of doubtful origin towards the fourth month of pregnancy. Labor came on at term, and progressed without giving the slightest sensation to the patient. Nor did it induce any amelioration in the paralysis, which persisted thereafter.

In another case, there existed before the pregnancy, distinct crises of hysteria and of epilepsy, but the hysteria disappeared completely while she was enceinte, to return again the eighth day after accouchement. The infant was attacked with spasms the next day after it was born, and succumbed three weeks later.

The epileptic attacks, though seemingly aggravated for the time being, did not bring about abortion, although the convulsions were of the severest character. This is the more surprising, when we consider what slight perturbations suffice sometimes to bring miscarriage. An observation reported by Charpentier is analogous: A woman, epileptic from birth, and whose epilepsia had been aggravated by a former pregnancy, became pregnant again; during the first, fourth and fifth months the attacks were of daily occurrence, and finally the status epilepticus supervened, in which she died, but the fœtus had, in the meantime, continued its growth uninterrupted, and without a symptom of irritation on the part of the uterus.

As to the influence of hysteria on labor, authors generally agree that it is of minor importance; that hysterical women usually arrive at term with living infants.

The author cites also, three instances of tuberculous meningitis supervening during pregnancy, and calls attention to it as being a coincidence, which he thinks is probably not rare. His study of the subject seems to demonstrate the following propositions:

1. That tuberculous meningitis, unlike the influence exerted by other grave acute affections, appears to show no disposition to interrupt the normal course of pregnancy.

2. The fœtus lives to the time of natural delivery, and does not participate in the tuberculous process.

3. By inducing labor in women affected with tuberculous meningitis, provided pregnancy be sufficiently advanced, that is to say, after the seventh month, the best chance is afforded to obtain a living infant.

A New Antiseptic Dressing.

Sir Joseph Lister has added another of his numerous contributions to the study of antiseptic surgery.

In an address delivered before the Medical Society of London, (*Lancet*) he publishes the results of numerous biological experiments made with the cyanide of zinc and mercury. As to its practical workings, he states that it has been thoroughly tested during the course of the past year at King's College Hospital, and that it is the most satisfactory dressing he has yet met with.

His address is very interesting, and details the manner in which he was led to adopt this substance in preference to others, and the manner in which its objectionable qualities and the difficulties encountered in preparing the dressing were met and overcome.

The composition of the so-called double salt is for the present uncertain, but this much is already estabiished: that the cyanide of mercury is in very much smaller proportion to the cyanide of zinc than "Watts' Dictionary" would lead us to expect from a true double salt. Its precise composition is not yet known, but is being investigated by the Pharmaceutical Society, who have undertaken the work.

This material has other uses besides the charging of dressings. The hair may be converted into an antiseptic dressing by rubbing the powder moistened with a weak solution of corrosive sublimate into hairy parts. Sir Joseph Lister recently removed seven sebaceous cysts from the scalp of a woman with the most satisfactory results. Having washed the hair with a 1 to 20 carbolic solution, he simply passed a comb over each tumor in the line where he was about to transfix, without shaving at all; after taking out the cysts, he rubbed in some of the moistened powder into the hair in the vicinity. A dressing of cyanide gauze was then applied and the seven wounds healed without disturbance.

Lister believes that psoas abscesses are entirely curable provided the surgeon use proper antiseptic methods and a reliable antiseptic from beginning to end of the treatment.

He has under his care at present a case of psoas abscess, shown to be of spinal origin, not only by the history of the case and the symptoms, but by the discharge of a portion of bone with the pus. In this man's case the temperature has never been affected in the least; he has put on flesh rapidly; the discharge, after the purulent and curdy matter that existed originally in the abscess was got rid of, has been of a serous character, and is in small and diminishing quantity. The opening made for the discharge is in the vicinity of the pubes, and the pubic hair used under such circumstances to be a constant source of anxiety to him unless frequently washed away. Here he rubs in a little of the moistened cyanide at each dressing, and thus converts the hair into an antiseptic dressing.

Whether this new antiseptic surpasses the bichloride of mercury or not remains to be seen. Its action is said to be not so much germicidal, as inhibitory to the growth and multiplication of organisms, a distinction which is more easily conceived than explained. At first glance its insolubility would seem to constitute an insuperable barrier to its over becoming the favored rival of corrosive sublimate in general surgical work; on the other hand, the fact that it is not so poisonous would speak in its favor. However, the test of experience will probably soon assign it to its proper rank. The method of preparing this dressing will be given in an early issue.

Pseudo Orchitis from Strain.

This much maligned malady is the subject of a paper by Dr. Guelliot, in *l'Union Medicale du Nord-Est.* Though denied by many authors, it is becoming to be recognized as legitimately belonging to the category of traumatic affections of the testicle, by eminent surgeons.

The author holds that contusion of the testicle may be due to the brusk contracture of the cremaster, as during an effort, or even to a strong contraction of that muscle; and the result is a veritable traumatic orchitis, with all its consequences. But he thinks that in the majority of cases, the effort is not the true cause of the inflammation, that it is but the determining cause, sometimes the occasion of an exaggeration simply of pain that has been latent up to that time. Such inflammation is nothing but an evidence of inflammation of the deeper seminal channels.

But Dr. Guelliot thinks it necessary to limit still further the number of cases of true orchitis from effort, and calls attention to a traumatic affection little known, which is probably frequently mistaken for disease of the testicular apparatus. It occurs in persons the subject of varicocele of the epididymis, of so slight a development, that it is unrecognized by them; under the influence of a violent effort, a venule ruptures and blood effuses; the swelling and pain therefrom simulate traumatic epididymitis; but the rapid progress of the affection shows that it is nothing but a circumscribed sanguinolent effusion.

We may then conclude—and Guelliot has collected many observations going far to prove it—that under the influence of an effort, it is possible to spermatic veins, healthy or degenerated. If the effusion is limited to the lower part of the cord, it may envelop the epididymis.

The Destruction of Rabbits by the Pasteur Method.

The experiments inaugurated at Rhode Island, for the purpose of destroying the great scourge of Australia, the rabbit, it seems, was only a partial success. The animals partaking of the food poisoned by infection with the chicken cholera germ, died promptly, but there was no transmission of the disease to other animals.

In this connection, it is interesting to note the various methods which the Australians have invoked to rid themselves of this plague. Prof. Watson, of the University of Adelaide, that the mange to be started amongst them; Dr. Ellis claims that if the South American polecat were introduced among them, their self respect would not allow them to continue such association, and freedom from their bondage would soon attain. The different colonies sacrifice various sums yearly in payment of rewards to hunters for killing them, and also for the construction of barriers against the rodents. A recent law requires each proprietor to destroy all rab bits living at his expense, the first infraction of which calls for a fine of $125, the second, $250. Many agriculturists, unable to keep up the contest, are forced to abandon their farms. The profession of huntsman, on the other hand, is quite a lucrative one. With a hundred snares, a person can make $20 a week. A farm of 10,000 acres is sufficient to accomodate at least a hundred hunters. It was thought possible to keep them out by means of wire netting, but it was found that in practice, the rabbits, when being chased by dogs, saved themselves by climbing up on such fences.

Primary Malignant Disease of the Duodenum.

The literature on this subject is very unsatisfactory when we attempt to overcome the diagnostic difficulties which this disease presents; E. N. Whittier, M.D., in a late number of the *Boston Med. and Surg. Jour.*, gives some points which should aid materially in arriving at a conclusion, although, as he says, "to each and every diagnosis of cancer of the small intestine there should be appended the reserve clause, an autopsy is needed for full confirmation.

To the clinician, the evidence furnished by subjective and objective symptoms may appear convincing in large measure, nevertheless it is defective and incomplete, lacking 'definition' in the relation which the rational and physical signs should sustain to each other; nor do the methods employed in differential diagnosis lead with sufficient directness to definite and logical conclusions."

The process of diagnosis by exclusion is the one which achieves the most desirable results in dealing with this question. The uncertainty of diagnosis is present not only in the first stages, but throughout the course of the disease, unless in exceptional cases.

Taking data from all sources, the frequency of intestinal cancer primary in the duodenum would appear to be about 1%. The most prominent factor, and the one that furnishes the most reliable symptoms, is diminution of the intestinal lumen, no matter what the character of the growth may be, and the tendency toward complete closure of the canal is persistent and permanent. The fact that the contents of the stomach are poured out through the pylorus in a liquid or semi-liquid state, renders it possible for a passage to be effected through a very small opening without much peristalsis, and thus masks the degree of obstruction produced by a neoplasm. For want of compensatory hypertrophy of the muscular coat of the intestine it occurs not unfrequently that the symptoms of lessened calibre, for a long time latent, suddenly declare themselves with great force, and with all the symptoms of an acute and complete stenosis. When the disease affects the upper third of the duodenum is is with the greatest difficulty differentiated from pyloric cancer, but because the bile and pancreatic secretion find their way into the intestine, intestinal digestion is less disturbed, while if the disease is in the lower third, the presence of bile as a frequent element in the vomitus and the evidence of gastric dilatation, are important symptoms. Blood may appear either in the dejecta or the vomitus, according as the gut is pervious or as the ulcerative processes affect the upper or the lower portion of the obturating mass.

While ordinary flatulency resembles very much the appearance of meteorism arising from obstruction of the large intestine, the result of cancer of the duodenum, on the other hand, is generally that the belly is shrunken and depressed, "-boat-shaped," and this in connection with the gastrectasis serves to measure to a considerable extent the degree of obstruction.

Pain is a very uncertain element in the diagnosis and localization; changes in the proportions of the intestinal fluids engaged in digestion, are notably frequent, and find expression in malnutrition and colicky pains, most marked when the disease involves the mid-section of the duodenum and leads to partial and temporary, or permanent and complete occlusion of the common duct. Jaundice, when present, confirms the opinion that the disease is located as above stated.

Tactile, tangible evidence of the disease is relatively infrequent and while the presence of a tumor may serve to confirm the diagnosis, its absence does not at all indicate the contrary; discoverable, demonstrable tumors do not exist in any considerable percentage of frequency. To his paper is appended a brief synopsis of thir-

teen cases of primary malignant disease of the duodenum.

Arthritic Hæmoptysis.

At a recent meeting of the London Medical Society, Sir Andrew Clark read a paper calling attention to the frequent occurrence of pulmonary hæmorrhage in elderly persons in whom neither pulmonary tuberculosis nor structural cardiac disease existed, but always some manifestations of the arthritic diathesis, such as osteo-arthritis, eczematous patches, bronchial and gastric catarrh, headache, etc. (*Brit. Med. Jour.*). The hæmorrhage is usually moderate in amount, but is dangerous because persistent, and is not amenable to the ordinary treatment for pulmonary hæmorrhage.

The pathological changes which account for the hæmorrhage consist in a degeneration of the terminal arteries of the lung. Wherever such a diseased artery was found there were around it curious isolated patches of emphysema, generally surrounded by hæmorrhagic extravasations; wherever the artery was much diseased the capillaries and venous radicules were also affected. The structural changes in the affected bloodvessels were limited to nuclear proliferation in the middle coat, and an amorphous and hyaline infiltration of it and of the intima.

He believes the order of events is as follows: First came some minute structural change in a terminal branch of the pulmonary or bronchial artery, with in consequence a more or less complete obstruction of the supply of blood throughout the territory involved; following this there arose degeneration of the capillaries and venous radicles, determining a true atrophic emphysema; the integrity of the vessels being thus impaired, the formation of thrombi or recurrent conditions of pressure served to bring about a hæmorrhage. From the fact that the patient has usually presented manifestations of the rheumatic diathesis for some years previously, and from the fact that the structural changes in the pulmonary bloodvessels are akin in character to those found in the diseased articulations, as well as for other reasons, he believes that such a hæmorrhage might be very properly termed an "arthritic hæmoptysis."

In conclusion, he submits the following propositions:

1. That there occurs in elderly persons free from ordinary diseases of the heart and lungs a form of hæmoptysis arising out of minute structural alterations in the terminal bloodvessels of the lung.

2. That these vascular alterations occur in persons of the arthritic diathesis, resemble the vascular alterations found in osteo-arthritic articulations, and are themselves of an arthritic nature.

3. That although sometimes leading to a fatal issue, this variety of hæmoptysis usually subsides without the supervention of any coarse anatomical lesion of the heart or of the lungs.

4. That when present this variety of hæmorrhage is aggravated or maintained by the frequent administration of large doses of strong astringents, by the application of icebags to the chest, and by an unrestricted indulgence in liquids to allay the thirst which the astringents create.

5. That the treatment which appears at present to be the most successful in this variety of hæmoptysis consists in diet and quiet, in the restricted use of liquids, and the stilling of cough; in calomel and salines; in the use of alkalies with iodide of potassium; and in frequently renewed counter-irritation.

MEDICAL ITEMS.

To Abort a Coryza.—One of the best agents to abort a coryza, according to Dr. Beverley Robinson, is carbonate of ammonia, in frequently repeated and rather large doses.

A Useful Hint.—If you use a fountain pen and find it difficult to unscrew the tip, wrap a rubber band a few times around it, and this will give you a good grip. A string or dampened piece of paper will also help.—*Med. and Surg. Reporter*

Ether in Chloroform Poisoning.—It is advised in the *Muench. Med. Woch.*, No. 15, to pour ether over the abdomen of a patient in chloroform narcosis; the cold produced by the evaporating ether induces deep respiration immediately.

An Antiseptic Ointment, certain in power and not unpleasant in odor, is often desired, not only by the obstetrician but also by the gynæcologist. Dr. Th. Parvin says that benzoated lard, to which 4% of creolin is added, will meet these indications satisfactorily.—*College and Clinical Record.*

A Novelty in the Treatment of the Insane.—Quite a number of the patients of the Indianapolis Insane Asylum were recently taken to the theatre. They behaved with perfect propriety, enjoyed the comedy, discussed the situations of the play with intelligence, and asked to be taken again.

Death from Sulphonal.—A death has been reported following the use of two fifteen-grain doses of sulphonal, the doses being given an hour and a quarter apart. The fatal result occurred forty hours after the first dose. The patient was a woman with melancholia, æt. 28 years. The mode of death was apnœa.

The Danger of the Telephone.—Dr. Albert R. Rice, of Springfield, Mass., recently found the woodwork surrounding the telephone in his office on fire, owing to this cause. It was discovered just in time to prevent the destruction of his house. The application

of such an instrument to the ear would, of course, produce fatal results, and while many telephones in the large cities have attachments which are supposed to prevent such accidents, the danger is certainly one which should not be overlooked.

Recognition of a Nurse's Services.—Miss Hamilton, the senior nursing sister of the Greek Hospital at Alexandria, and who belongs to Cove, Loch Long, has been decorated by His Highness the Khedive with the Khedival Bronze Star, in recognition of the valuable services rendered by her to the hospital since 1883.

Death from Ether.—A death under ether is reported to have occurred at Bellevue Hospital, New York, on November 5. Ten minutes after anæsthetization was begun asphyxia took place. The operation was for abscess in the cervical region. At the autopsy the kidneys were found to be in a state of cystic degeneration.

Beaumont Hospital.—The faculty have purchased the site at the southwest corner of Pine street and Jefferson avenue, upon which, in the spring, they will erect a commodious building for college purposes.

In the meantime they will occupy the building now on that lot, after removing from their present quarters on December 1.

Medical Registration in North Carolina.—The State Board of Health of North Carolina has issued the following: "All physicians in the State must register with the Clerk of the Superior Court before January 1, 1890, if they intend to practice thereafter and collect their fees for services rendered. There will be no subterfuge allowed. The law must be enforced."

When to Throw Science to the Dogs.—Professor (about to examine a candidate for graduation): "Can you tell me why I, professor of hygiene, dwell in an old, damp and badly ventilated house?

And, as the candidate remains silent, apparently astonished, graciously solves the problem:

"You do not know. Well, it is because I cannot rent it!"

New Treatment for Gonorrhœal Orchitis.—In 1888, Dr. Dormand advocated the administration of tincture of anemone pulsatilla in orchitis, claiming that it would cure cases that had withstood other treatments for various lengths of time. Lately, in *l'Union Medicale*, Du Castel has again called attention to the prompt relief afforded by this medicament. He prescribes it in the form of a syrup, giving a drop every two hours.

Quinine in Cholera Morbus.—Dr. W. Morehouse Galliger reports, in *Ther. Gaz.*, that he has found that quinine has an almost specific effect in the cholera morbus of adults. He says that he once gave it to a case of the kind, in three grain doses, because she could retain no morphine on her stomach, and for the want of anything else to give at the time. To his surprise she retained the quinine and began to improve.. Since then he has used quinine in all similar cases and has never known it to fail.

Fastening Rubber Bandages without Tapes.—An exchange notes a convenient method of keeping rubber bandages on the leg in place of tapes, which often by their tightness frustrate the object of the bandage. After applying the bandage the last five or six inches are thoroughly moistened and then slipped under the last two turns of the bandage. It is said to be even more effective than the tape.

Incompatibility of Antipyrin amd Chloral.—M. Blainville, a pharmacist of Paris, was called upon to put up a prescription containing four grammes of antipyrin and five of chloral hydrate in fifteen grammes of water. An oily precipitate was immediately thrown down which resembled neither chloral nor antipyrin in taste, but recalled somewhat that of coriander seed. A mixture of antipyrin and quinine is also incompatible, both substances being at once precipitated from the solution.

A Medical Relief Association.—A mutual benefit relief organization, which should find more imitators than it has hitherto, exists in England for the relief of medical men who are overtaken by sickness or accident. Its title is the "Medical Sickness and Life Assurance Society." Its directors are chiefly medical men who serve without pay, and it has a capital of $140,000. It addresses itself principally to the junior members of the profession, and to those practising in the country.

Chrysarobin in Hæmorrhoids.—Dr. Kossobudski speaks of this drug in high terms, but he differs from Unna in the quantity. After washing the swelling with a 2% solution of carbolic, or a 1% of creolin, he recommends the following ointment to be applied twice or three times a day:

℞	Chrysarobin	0.8
	Iodoformi	0.3
	Ext. belladonna	0.6
	Vaselin	15.0

M.

Or a suppository may be made with cocoa butter. If bleeding be present tannin may be combined. Dr. Kossobudskii affirms that pain, smarting and bleeding will disappear in two or three days.—*Medical Press.*

Seeking a Resting Place for the Dead.—Efforts have been made on various occasions to provide mortuaries in Paris for persons who, for any reason, were not domiciled anywhere at the time of their death. A painful instance of the inconvenience resulting from the want of them occurred recently. A journalist, in

the last stage of phthisis, feeling better one day, took advantage of this to induce his brother to bring him in a cab from the out-lying suburb, where he had been residing, into Paris. He, however, succumbed soon after passing the *barriere*, and then began for the brother a tedious and horrible promenade. Refused at his own hotel, declined at the hospital, on the ground that it was not a mortuary, rejected at the morgue because only the unidentified dead were received there, the whole night was passed in perambulating in the cab, the dead body of his brother that nobody would receive. It was only by a derogation from the rules of one of the hospitals that the brother was enabled to find a temporary resting place for the deceased.—Paris Correspondent *Medical Press and Circular.*

The Protestant Hospital:—This hospital has been reopened with the addition of twenty-five new rooms, and many changes looking to the comfort and care of the patients.

One of the new features is an operating room, arranged with a view to fulfilling the requirements for aseptic and antiseptic operations.

The profession is invited to visit and inspect the hospital, where they will receive the courteous attention of the matron, Miss Tuthill, a graduate of the Charity Hospital training school.

The Anglo-American Vienna Medical Association.—The Vienna *Weekly News* gives the following additional information regarding the Anglo-American Vienna Medical Association, to the initial movements of which attention was called last week. Such an organization would be of great aid if established in Berlin, Leipsig, and similar Continental cities. A meeting of British and American physicians was held at No. 12 Landesgerichts Strasse, to consider the question of establishing an association for the purpose of furnishing all needed information to English-speaking medical men coming to study in Vienna. A large proportion of those now in the city were present. After a lengthy discussion, it was resolved to start such an association under the title of "The Anglo-American Vienna Medical Association." A committee of management was appointed, with five members, representing different branches of medical study. Their chief duty will be to supply information to new-comers, on their arrival, as to matriculation, medical courses, lodgings, etc., and, when necessary, to call meetings of the Association. The committee, on the occurrence of vacancies in their number, through members leaving Vienna, will fill these up as soon as possible. The office of the Association will be at No. 12 Landesgerichts Strasse, a few minutes' walk from the General Hospital. It was agreed that membership should be open to any British or American physician or medical student, on payment of an entrance fee of one gudden. The application to the authorities, necessary according to Austrian law, for permission to establish such a society has been made, and the committee expect that toward the end of October the Association will be in working order. Meanwhile, letters of inquiry addressed to the President or Secretary will at once receive attention.—*Med. News.*

SELECTIONS.

MIGRAINE, ITS PATHOLOGY AND TREATMENT.

According to Anstie, migraine (hemicrania) is a variety of neuralgia of the opthalmic division of the fifth nerve. He remarks that the attacks of migraine often interchange with neuralgia seizures; that they often begin with pain distinctly located in the supraorbital nerve as the result of exposure to cold or other of the causes of ordinary neuralgia. This view is favored by Senkler in "Pepper's System of Medicine."

Romberg regarded migraine as a neuralgia of the cerebrum, but Hesse observes that the symptoms of this neurosis are equally compatible with its location in the branches of the fifth distributed to the meninges and bones of the cranium.

There is, however, much to be said in defense of the view that migraine is primarily a neurosis of the sympathetic nerve. Accordiug to Du Bois-Reymond, the phenomena of migraine are best explained by the supposition that there is abnormal excitation of the sympathetic on the affected side, and he emphasizes in this connection the retraction of the temporal artery, the pallor of the countenance, the dilatation of the pupil; all of which are due to tonic contraction of the vascular and oculo pupillary muscles.

But, as Jaccoud remarks, the constancy of these phenomena has not been established, and Moellendorff afterwards maintained a directly contrary view, to wit: that the symptoms of hemicrania depend on a unilateral relaxation of the vessels of the head, from want of energy of the vaso-motor nerves. Eulenburg adopts an intermediate theory, affirming that a certain class of cases is undoubtedly vaso-motor in its origin. He describes two types of migraine; the sympathetico-tonic or angiospastic, and the angio-paralytic or neuro-paralytic forms. In the one, the face is pale and sunken; in the other, it is hot, turgid, and flushed during the height of the attack. In the one, the pupil is dilated and the temporal artery appears as a hard cord; in the other, the pupil is contracted, and the temporal artery is swollen and throbs with iucreased force. In the one, the eyes are pale and sunken; in the other, they are suffused and prominent.

Jaccoud reconciles the pathological difference above mentioned by assuming that there cannot be two vascular conditions so contradictory, as the substratum of migraine. If, he says, clinicians have witnessed opposite phenomena, it is simply because they observed at different periods; in other words, the paroxysm of migraine is constituted by an abnormal excitation of the sympathetic followed by a paralysis by exhaustion, which marks

the decline and the termination of the paroxysm. The contraction of the vessels during the onset and the active period of the attack explains why the pain is exaggerated at each pulsation of the artery; as for the origin of this pain, it may be attributed to the vascular cramp itself, which compresses the nerve filaments contained in the unstriped muscles.

Hemicrania is a disease from which no station or condition of life is exempt. Rich and poor, the man of ease and the fashionable lady, the mill-operative and the kitchen drudge are alike subject to migraine. Among the factors in its production, hereditary predisposition is the most potent. The disease follows the female line, being usually inherited from the mother only, (Eulenburg). When there is a strong heredltary tendency, girls of quite a young age may be attacked by migraine. Eulenburg has known girls of four and five years to be sufferers.

In half the women affected with migraine, the attacks occur at the menstrual period or immediately after. In other cases the attacks are due to mental excitement, after attendance at a party, at a theatre, etc. Sometimes the attack is provoked by reading and study; some persons have hemicrania from reading by artificial light. The attacks sometimes appear to originate in digestion.

It is in this form of neuralgia that the recently discovered analgesics, antipyrin, acetanilide, phenacetin, exalgine, seem to do the most good. Here the triumph of guarana and caffeine is sometimes seen. When the attack can be traced to the stomach, ipecacuanha in one-fourth grain doses every hour has been commended, also rhubarb and soda, or some of the effervescing aperients.

In the angio-spastic variety, nitrite of amyl inhalations, and nitro glycerine by mouth, have been beneficial. In the angio-paralytic form, ergot has been found useful.

Senkler speaks favorably of bromide of lithium, fifteen grains every hour for two or three doses. The effervescent bromide of caffeine, or bromo-pyrine, is a good preparation. Seguin speaks enthusiastically of cannabis indica, one-fourth grain doses of the alcoholic extract three times a day, to be continued for weeks and even months. Aconitia (one two-hundredth grain) and gelsemium have been praised; the former is perhaps one of the most certain remedies in angio spastic variety. Malarious forms are speedily benefited by large doses of quinine. Always, as prophylactic treatment, arsenic and cod-liver oil are indicated.

Anstie and Eulenburg think well of galvanism to the head and sympathetic. Firm pressure on the head and compression of the carotids sometimes give relief; the same may be said of sinapisms to a nape of the neck and the application of a hot water bag to the back of the head.

After all, resort must sometimes be had to hypodermics of morphia in the atrocious suffering of migraine. —*Bost. Med. and Surg. Jour.*

THE CLINICAL SIGNIFICANCE OF ALBUMINURIA.

The importance of a proper interpretation of albumen in the urine, not only for purposes of medical prognosis, but especially in connection with the acceptance of life-insurance risks, appeals strongly to every member of the profession. The almost universal usage of insurance examiners is, we believe, to reject albuminuric subjects, or, at least, to defer their acceptance till repeated subsequent examinations have proved the absence of the offending substance.

Yet cases are accumulating in which it is claimed recovery has ensued after a temporary or periodical occurrence of albuminuria. Many such instances are collected in the extended monograph of the late Prof. Calvin Ellis; which formed the last of his valuable clinical and pathological studies. Our English brethren in their annual meeting at Leeds, have been considering the same subject, and their deliberations, albeit involving perhaps a "conclusion in which nothing is concluded" will have an interest for our readers.

Dr. F. W. Pavy, whose views of "cyliical albuminuria" are sufficiently well known to the profession, opened the discussion and, as might have been expected, took the ground that albuminuria *per se* in a patient presenting, after careful examination of all his organs and functions, no other abberration than the albuminous urine need not necessarially millitate against ahe safety of the insurance risk. He classified the cases under three heads:

1. Those in which very small traces only are observed.

2. Those in which there is a notable quantity of albumin and that constantly.

3. Cases of the so-called cyclical variety, where there is regularly a notable amount at one period of the day, and an absence at other periods.

The first group he considered the most favorable as to prognosis, the second least so, and the third of intermediate augury. Even in the second he thinks that some cases run on without serious results arising, but admits that our knowledge does not at present permit us to differentiate such from cases of Bright's disease. Of cyclical cases he thinks a favorable opinion may be given, as a simple medical prognosis, but where the question of life-insurance is involved, suggests that an increased premium be required.

Dr. George Johnson, of the King's College Hospital, took a square issue with Dr. Pavy, and repudiated all "physiological" or "functional" albuminuria. Admitting than an albuminuric subject might have no symptoms, and might thus fall into Dr. Pavy's favorable classification, he claimed that such was merely a parallel case to that of a patient with cardiac valvular incompetence, who may live for years without any symptoms, but whose disease is not to be therefore diagnosticated as functional. The fact of the recently ascertained frequently of albuminuria he interpreted, not to

show its lask of gravity but only to indicate the necessity for universal urine testing.

Dr. Maguire said he had found disorder of the circulation in all cases of functional albuminuria. The disorder was in the direction either of increased or lowered arterial tension. The former occurred in persons having a family history of Bright's disease; the latter in persons of weak circulation, in whom the albuminuria was essentially cyclical, though the latter peculiarity might occur in Bright's disease also.

Dr. Pye-Smith belived that there was no physiological albumen, and that functional albumimuria was for the time being pathological. He compared albuminuria with hemoptysis always serious but not necessarily indicating incurable organic disease. He would defer an insurance of the albuminuric subject rather than try to draw a distinction which was often impossible to be drawn.

Prof. W. T. Gairdner, of Glasgow, said that the occurrence of albumen after great physical or mental strain showed not that the albuminuria was physiological, but that the strain—whether, for instance, in pedestrianism or in cramming—was unphysiological. He would, on the other hand, admit the term functional albuminuria. Its presence in a life-insurance applicant calls for postponement.

Dr. Rabagliati interpreted albumen in the light of specific gravity. If the latter was above 1.020, it suggested beginning lithemic nephritis. If below 1·010, it meant further advance of the disease. The Scottish Widows' Fund found the average death-age of albuminurics to be fifty-seven, and he advised considering that to be the life expectation of an albuminuric without casts or other definite lesions.

Dr. Saundby would accept for insurance "unquestionably" a case where the albumen disappeared after a period of recumbency. He would always reject a risk where there had been nephritis, and said that while he believed there were other innocuous forms of albuminuria, they were, for insurance purposes at present, speculative, and should be taken only for short periods or increased premiums.

Dr. W. J. Tyson thought the number of deaths from Bright's disease, small compared with the number of cases of albuminuria met with in practice. He lamenter the popular knowledge of the usual significance of albumen, which gave patients much unnecessary anxiety and distress.

Dr. George Harley believed that the albuminuria of hepatic, cardiac, cerebral and pulmonary origin was associated with a specific gravity of over 1.015, and was thus distingnishable from the albuminuria of Brighe's disease, which, being associated with disorganization of the renal tissue and retention of salts, always had a lower density of the urine.

In general, the position that albuminuria is not necessarily of grave import seemed to be taken by Drs. Pavy, Tyson, Saundby and measurably by Dr. Drysdale; Drs. W. T. Gairdner and Eddison occupying a somewhat intermediate position, both said they looked upod albumen as a "danger signal." The more conservative view, which distrusts all cases that have been albuminuric, was heid with more or less rigidity by most of the other speakers.

The physician who looks to the Leeds discussion to clear up the question of the prognosis of albuminuria will be much disappointed. The solution of the problem requires the answer to two questions. First, is albuminuria consistent with health? Second, if so do we possess any means of distinguishing such cases from those in which it accompanies grave disease? The answer to the first question, which a decade of years ago would have been universally negative, is now given by an influential contingent of the profession as affirmative. The answer to the second question is not yet forthcoming—*Boston Med. and Surg. Jour.*

THE EFFECT OF DISTENSION OF THE ABDOMEN ON CIRCULATION AND RESPIRATION.

The effect of pregnancy, ovarian dropsy, ascites, and other diseases leading to great distention of the abdomen, in impeding respiration and disturbing the action of the heart, though there is little unanimity or precision in the opinions that are entertained respecting them, are generally admitted. Such affections are, indeed, of a chronic nature; the abdominal walls have time to yield, and the organs both in the abdomen and in the chest are enabled to accomodote themselves to the altered conditions; but we are not aware that any experiments have been undertaken to determine the effects of sudden distention of the abdomen in animals until the apppearance of a paper by Dr. G. Heinricius of Helsingfors, in a recently published number of the *Zeitschrift f. Biologie.* It is generally believed that in pregnancy there is marked increase in the tension of the systemic vessels, and that as a consequence the heart undergoes hypertrophy; but although such statements are to be found in almost every gynæcological text-book the evidence on which they rest is extremely slender. In order to determine whether any obstruction to the circulation which may evist in the uterine vessels in pregnancy would raise the general blood pressure, Dr. Heinricius first performed the very simple experiment of tying the arota just above the division into the iliacs, and found that in four rabbits no change took place in the arterial tension of the carotids. Hence no effect was to be expected from ligature of the uterine arteries nor from any such obstruction as might proceed from their distribution in the pregnant uterus and in the placenta. He next proceeded to ascertain by experiment the effects of distension of the abdominal cavity in the rabbit and cat. He employed a double cannula, which was introduced through or at the side of the linea alba by a small puncture in narcotised animals; one arm of the cannula was connected with a vessel containing normal saline solution at the temperature of the blood, and

the other with a manometer. Arrangements were further made to record graphically the respiration and the blood pressure in the carotid. The respiratory and blood pressure curves were taken after each 50 or 100 cubic cm. of the solution had been injected into the abdomen from the vessel, and the phenomena which were prevented proved to be remarkably uniform. In all the experiments, which numbered fifteen, it was found that the abnormal cavity could be filled with a large quantity of fluid, so that the parietes were quite tight, without either pulse or respiration being materially disturbed. It was only after very great distention had been produced that the respirations became more frequent and deeper, the expiratory effort being particularly well marked. This dyspnœa was apparently attributable to the diaphragm being pressed upwards and the capacity of the thorax correspondingly diminished, so that the mechanical obstruction to respiration was occasioned. The effect of this was that the accessary respiratory muscles were being brought more into play, and the breathing became more and more thoracic in character. But these efforts soon became insufficient to compensate for the defective action of the diaphragm. The respiratory centre became excited, but was soon paralysed by the venous blood. The respirations underwent a change; they became first shallow and slow, then deeper, dyspnœa finally occurred, and the animal died. If we turn now to the effects of the distension on the circulation, we find that when the distension became considerable the pulse at first increased in frequency, then became fuller, afterwards less frequent, and before the death of the animal usually suddenly smaller. The arterial blood pressure first began to rise when the frequency of the pulse had considerably diminished, and then gradually fell as the pulse became smaller. Dr. Heinricius gives in the article we have alluded to, numerous tracings which collectively show that the abdomen may undergo great distension without abrogation of the more important vital functions. The abdominal cavity of the rabbit can support in this way the introduction of 500 cubic cm. of fluid without difficulty, and nearly a litre and a half of fluid can be further injected before dangerous symptoms supervene, clearly showing how extraordinarily yielding the abdominal parities are, and afforded a proof that it is not necessary to appeal to the slowness with which they are distended in pregnancy and in cases of abdominal tumor to explain the slight interference with the main functions of life that occurs in those conditions.—*Lancet.*

EMPYEMA OF THE ANTRUM.

At the last meeting of the Odontological Society Dr. Felix Semon read a paper on "Some Points in the Etiology, Diagnosis, and Treatment of Empyema of the Antrum." In the great majority of cases the antrum is affected secondarily, the pathological process starting either from the nose or from the teeth, but in some few cases it is quite possible that it has originated in the antrum itself. Any inflammatory process affecting either the mucous membrane of the bones of the nose, or the periosteum of the teeth or alveoli may set up purulent inflammation of the antrum. Authorities differ with regard to the relative frequency of these two main causes, but Dr. Semon thinks that clinical observation shows that an overwhelming majority of cases of antral empyema have their origin in affections of the alveoli of the teeth. Bayer of Brussels draws especial attention to the frequency of the combination of nasal polypi with purulent catarrh of the antrum, and as exceptional causes may be quoted its occurrence after section of the infra-orbital nerve by Malgaigne's method and from the stump of a tooth being forced into the antrum during an attempt to extract it. The diagnosis of empyema of the antrum may be divided into (1) cases in which there is no discharge into the nasal cavity, and (2) cases where from some cause the opening is not patent. In the great majority of cases in which the nasal opening is not obstructed the disease is characterized by a unilateral periodical discharge from one nostril, the periodicity corresponding to the different positions of the patient's head. From the anatomical position of the ostium maxillare the pus can only find exit when the antrum is nearly full or in certain postures, as when recumbent, especially when lying on the sound side, or leaning forwards, as in writing. Frontal headache, depression of spirits, and general derangement of health are frequent accompaniments. With a good light and a nasal speculum the pus may be seen issuing from the ostium maxillare, the superior meatus being healthy. If this is not clear, the nose should be carefully cleansed and the patient directed to lie down for a few seconds on his abdomen on a sofa, with the head low and inclined to the sound side, when upon resuming the horizontal position, if there is pus in the antrum, a greater or less quantity of discharge will be seen in the middle meatus. Where there is obstruction of the ostium maxillare there will be, in extreme cases, distention of the inner wall of the cavity, and in almost all cases violent neuralgic pains in the face and teeth on the affected side, and often swelling of the soft parts of the cheek, sometimes of an erysipelatous character. In forming a diagnosis it must not be forgotten that disease of the frontal or ethmoidal cells may coexist. Should an exploratory opening be necessary to clear up the diagnosis, it may be made through the nose, the socket of a tooth, or the alveous, either of the two latter being preferred by Dr. Semon. Heryng maintains that in obscure cases electric trans-illumination is of great value. The patient is placed in a perfectly dark room and an electric lamp of not less than five volts passed into the mouth, when the maxilla will appear red and translucent on the sound side, but dark on the affected one. With regard to treatment, which is essentially free drainage, Dr. Semon decidedly prefers an opening through the mouth to one through the nose, as it is the most dependent

part and most easily accessible to the patient for syringing; but in obstinate cases he advocates a counter-opening in the nose, and, that failing to effect a cure, a large opening through the canine fossa and stuffing the antrum with iodoform gauze.—*Lancet.*

THE PROPHYLAXIS OF TUBERCULOSIS IN BAVARIA.

At the instance of the Bavarian Home Office, the Ober-Medicinal Ausschuss (superior Medical Com mittee), with Prof. Bollinger as its reporter, has just pronounced on the theory of Dr. Cornet, of Berlin, as to the spread of tuberculosis, and the best means of checking it. To Dr. Cornet's method and findings it has no exception to take, indicating as they do the danger pro ceeding from the pulverized sputum of the phthisical, a danger recognized by the profession ever since the discovery of the tubercle bacillus. What the committee objects to in Dr. Cornet's view is his entirely ignoring the influence of heredity and predisposition as factors in producing or inducing the disease. He goes so far as to stigmatize with the epithet "*unselige*" (fatal) the doctrine (practically and theoretically well founded) of innate and inherited tendency to tuberculosis. The committee, in answer to the Home Minister's question, whether Dr. Cornet's results would warrant him in accepting these as the basis of practical measures for arresting the diffusion of the malady, remarks that Dr. Cornet's deduction involves an extreme optimistic standpoint, and that it can not assent to his dictum that "the prophylaxis of tuberculosis attained its end with the simplest means imaginable." Measures of the State for the prevention of the disease must await the solution of the problem whether in the genesis of tuberculosis contagious infection or inherited tendency plays the cheif part. Dr. Bollinger, before an audience of the first Upper Bavasian Medical Diet, recently proposed that the State prisons, in which the mortality from tuberculosis averages from 38 to 60%, should be utilized for the experimental determination of the difficulty. With this view a prison should be repeatedly cleansed and disinfected as if it harbored the plague or small pox. Every case, moreover, of tuberculosis occurring in it should be isolated, or, better still, cleared out. The reduction, or disappearance in these circumstances of the tuberculous cases would prove that infection proceeding from phthisical or from the infected locality played the cheif part, and that inherted tendency was the less important factor. The committee concludes that the Home Office should institute the investigation thus recommended, and, considering the importance of the matter, should provide the necessary grant without delay. Meanwhile, our readers may be reminded that Dr. Cornet, with a dust suspected to be tuberculous, ob tained by scrubbing a wall of from one to two square meters with a sterilized sponge, infected 392 porpoises, and that of these 196 shortly thereafter died under acute septic and purulent attacks, while the survivors remained partly unaffected, partly turberculous—the later dying in from 38 to 50 days after infection. The whole subject, indeed, is agitating the profession in Bavaria to its depth, and the medical societies, which meet during the second half of October, have received from the Home Office a mandate to discuss the criticism passed by the Upper Medical Committee on the practical application of Dr. Cornet's views.—*Amer Prac and News.*

CHLORAMIDE.—Certain of the properties of this new hypnotic should not be overlooked. It is slowly decomposed by carbonates and bicarbonates, and quickly by caustic alkalies; by weak acid solutions it is not easily decomposed. From this it follows that it is best given in slightly acid solutions rather than in alkaline ones. According to von Mering, the doses is 45 grains. After six healthy students had taken doses of from 15 to 60 grains each, they all slept two hours longer than usual, and only two observed any after-effects, and they complained simply of a slight headache.

Drs. Hagemann and Strauss gave the drug to fifteen patients suffering chiefly from nervous and cardiac diseases, phthisis and anæmia.

No changes were observed in the constituents or the quantity of the urine The results obtained varied considerable; sometimes a good result follows the use of 15 grains, while in other cases, large doses were useless. In a few cases it did not always succeed, even in large doses, although the insomnia was unaccompanied by pain. In two cases a smaller amount gave sleep and relieved unmistakable pain.

Von Mering reports it as an unsuitable substance to employ to relieve pain. It is not without unpleasant accompaniments, this is illustrated by one case where the patient complained of dizziness during the hole of of the following day, though in this patient head symptoms were caused by sulphonal to even a more marked degree.

Other observers have arrived at much the same result; at present it may be regarded as an uncertain hypnotic, ineffective when there is pain and liable to be followed by undesirable symptoms.—*Berliner klinische Wochenschrift*, No 33, 1889.

In another number of the same journal Dr. Alt, of Halle, after a considerable experience with this new hypnotic, gives it his endorsement. He belives that it is a desirable addition to our resources, especially in the treatment of simple insomnia. It exerts no harmful effects either upon the circulation, respiration, or digestion, and is followed by only slight unpleasant accompaniments.

For insomnia doses of from 30 to 45 grains were administered, which were followed by sleep in from one-half to three quarters of an hour in most of the cases. —*Ibid*, September 9, 1889.—*Ther. Gaz.*

Scientific Uses of the Eiffel Tower.—M. Janssen, of the Institute of France, is of the opinion, that the Eiffel Tower will have many scientific uses. One of the greatest difficulties of meteorological observations is the disturbing influences of the station of observation itself? How for example, can a true deviation of the wind be observed if a purely local obstacle causes it to deviate? And how can a true temperature of the air be determined by a thermometer influenced by radiation from surrounding objects? Thus, the meteorological elments of great centres of habitation have to be taken outside those centres and at a certain height above the soil. The tower, since it rises to a great height, and from the nature of its construction does not modify in any way the meteorological elements to be observed, will get over this difficulty. A height of 300 yards is in itself not negligible quantity from the point of view of rainfall, temperature and pressure, but these circumstances give all the more interest to the institution of comparative experiments on variations due the altitude; the electrical interchanges between the soil and the atmosphere can also be studied to advantage. Special arrangements can be made for avoiding accidents, and results of great interest should be obtained. M. Janssen recommends also the institution of a service of meteorological photography. A good series of photographs would give forms, movements, modifications which the clouds and atmospheric conditions undergo from sunrise to sunset. Thus a history of the skies would be written on a radius not hitheroto dealt with. In physical astronomy various other observations might be taken, especially in relation to the study of telluric spectrum. M. Eiffel announces that three laboratories have already been arranged on the tower. One will be devoted to astronomy, and the second will contain registering apparatus from the central bureau of meteorology, and will be devoted to physics and meteorology. MM.Mascart and Cornu expect to draw great advantages from its use, in the study of the atmosphere. The third is reserved for biology and micrographic study of the air, to be organized by M. Henocque. M. Cailletet is arranging a great mercurial monometer, with which he expects to obtained pressure as high as 400 atmospheres.—*British Medical Journal.*

"Thermo-Palpation."—It has been known for some time that there is a difference in the surface temperature of the body corresponding to the organs underneath—that is to say, the temperature is higher over the lungs than over the liver or the heart. From a communication published in the *Orvosi Hetilap.*, one of the chief medical journals in Hungary, by Herr Jonas and Dr. Beneczur, it appears that this fact is available as a basis for a novel method of physical examination which may be styled "thermo palpation." These observers say that it does not require any peculiar sensitiveness of touch or any special education to appreciate the difference of temperature on passing the fingers over the surface of the body from the situation of the lungs to that of the liver, and that patients themselves and students who had not yet learned percussion were quite able accurately to detect the height of a pleuritic effusion by the difference of temperature. Diseased and healthy organs can be mapped out in this way by going over the surface, first say, downwards and then upwards, when the line of demarcation will be distinctly felt. The general principle appears to be that organs containing air, such as the lungs and intestines, permit of greater surface warmth over them than more solid organs such as the heart, liver, spleen, etc. Of course, instead of using the fingers, a differential thermometer may be employed, and much slighter differences may be recognized than is possible by the touch alone. The authors claim for thermo-palpation that it is so simple that it may be used by all practitioners as an additional method of examining their patients. Another advantage which occurs to us is that if the method is as trustworthy as they believe it to be, a good many sensitive patients will greatly prefer it to that of percussion, which, even when carried out with as much consideration for the patient as possible, is to some persons exceedingly distressing. Indeed, it is probable that some people avoid as much as possible sending for a medical man from the dread they have of being percussed.—*Lancet.*

New Cure For Cataract.—Editor *Medical Age*:—My Dear Doctor:—I enclose a letter which, through the kindness of the Post-master fell into my hands a short time since. It "speaks for itself," and its richness is too good so keop. Can you find space for it in the *Age*? A *fac simile* would no doubt be enjoyed by many of the readers.

Yours fraternally,

Eugene Smith.

The following letter was addressed by its writer to the Post-master at Detroit to be delivered to the "best Eye Doctor in Detroit:"

port huron ste mich august 14 1889.

Dr. i like to let you now how to take a cataract from the eye wittout cutting the scin and pulling it out i have found A way to absorbed it A way with medison and take it if you would like to now plese Drop me a line. i have applide for a pattend.

Calvin Cheesman.

port huron ste
mich

The Astley Cooper Prize amounting to $ 1500, will be awarded in 1892. The question proposed is, The Influence of Microorganisms upon Inflammation. The papers must be written in English or accompanied by an English translation, and should be addressed before January 1, 1892, to Guy's Hospital London. The prize will not be awarded to two or three working conjointly.

Odorless Iodoform.—The complete deodorization of iodoform has been the subject of an extensive series of experiments by Dr. Oppler, of Strassburg. He recommends finely powdered roasted coffee as the most suitable substance. The formula which he gives for the ointment is as follows:

℞ Iodoform, - - - 1 part.
Paraffine ointment, - 10 parts.
Roasted coffee, finely powdered, 3·10 part.
—*Kan. City Med. Rec.*

Preservation of Urine for Microscopic Examination.—When it is desired for any reason to preserve urine for making a microscopic examination, Wendringer recommends the addition of a solution of boric acid in borax, made by dissolving twelve per cent of boric acid in a twelve per cent solution of borax. To the urine to be preserved, one-fifth to one-third of its volume of this solution is to be added.—*Am. Jour. Med. Sciences.*

Mow to Recover Mounts.—Spoiled mounts are of no value, but the slides and cover glasses are. When a mount spoils beyond repair, place it in a wide mouthed bottle containing equal parts of alcohol, oil of turpentine, coal oil, and benzol. After a few days' maceration in this liquid, the slides and cover glasses may be wiped clean, and are then just as good as new.—*Med. and Surg. Rep.*

Cocoanut as a Tænicide.—Parisi, of Athens, reports several cases in which the endocarp of the cocoanut acted as an efficient tænicide. No preparatory treatment is necessary. The patient drinks the "milk," and then eats the endocarp of the nut. This is followed by a feeling of abdominal uneasiness and pain, slight diarrhœa, and finally the expulsion of the tænia after some hours.—*Jour. Am. Med. Asso.*, March 9.

Holding On.—The story comes from the West of a miser who swallowed a five dollar gold piece, but the stomach-pump could only bring up $4.50.

Another of those nice blotters of which we have already made mention shows a winged cherub carrying a Dictionary Holder under one arm and saying: "I am making a flying trip in the interest of education. The basis of education is the dictionary, and the base of the dictionary should be a Noyes Holder. The valued unabridged is of little value unless it is getatable (look this word up). A book held edge up gets full of dust, soiled and spoiled unless hugged together with strong springs. Only the Holders manufactured by La Verne W. Noyes, the originator and inventor of Book Holders, have such springs." Send to him, at Chicago, a two-cent stamp to pay postage and receive in return this series of blotters.

POINTS OF INTEREST ON THE LOUISVILLE AND NASHVILLE RAIL ROAD.

Pass Christian, Miss.,

Is the largest of the resorts of the Gulf coast, both in extent of area and the number of its inhabitants, resident and transient. It is but fifty-eight miles from New Orleans, and on that account is more frequented by the residents of that city.

"The Pass," as Southern visitors and residents term it, has a water frontage on the Mississippi Sound of six miles, including its villa ornamented wings of West and East End. Along this entire front is a broad shell-paved avenue, lying under the shade of magnificent live-oaks and lofty magnolias. Its groves of oaks and magnolias and its surrounding forests of pine are covered with perennial verdure. Their evergreen foliage produces the impression that one is in the midst of a region of perpetual summer; and this impression is not far wrong, as the climate is so mild that roses and violets bloom through the short winter, and this is at all times a land of flowers. The meteorological statistics show that its average range of winter temperature is about sixty degrees Fahrenheit. The frost-bearing winds of this region blow from the northward. The seacoast is sheltered in that direction, from its Borean breath, by the great southern pine belt more than a hundred miles wide, which follows the coast line of the Gulf States. The prevailing winter breezes are from the southward, across the Gulf of Mexico, the mighty thermal manufactory that sends its mild sea currents over three thousand leagues of ocean to temper the distant winter climes of Norway, Britain, France, and Spain. It is under the genial influence of the neighboring Gulf waters and the perpetual Gulf breezes that blow from the tropic islands, that the forests of the Mississippi seacoast are clad in perpetual verdure, and its flowers kept in constant bloom.

In the drive along the sea front of Pass Christian, from one end of the town to the other, the tourist sees a long succession of luxurious residences located in spacious park-like grounds, where the shadows of forest-grown oaks, elms, and magnolia float over velvety lawns in patches of shade and patines of sunlight; extensive boarding houses, with rustic benches scattered along the flower bordered and shrubbery-shaped walks about them; and hundreds of pretty cottages, with hammocks swinging lazily about in the breeze that visits their broad verandas.

In winter it is a picture of blue skies, green groves, bending and waving in the south wind, grass plats, bright with the presence and sweet with the perfume of violets and roses, and mellow sunshine, welcome as the new, life giving warmth of the Northern May.

CLINICAL LECTURE.

BY PROF. WM. M. PEPPER, M.D., L.L.D.,
Provost of University of Pennsylvania.

Renal Calculus.

The first patient to whose case I wish to call your attention is a man, æt. 40 years, accustomed to hard work from his youth, and of robust physique.

Since last May he has been subject to severe attacks of pain, which affect him in the manner I am about to describe, and which have been so violent as to render him unfit to follow his occupation.

These attacks occur about every three or four weeks. They are ushered in by pain in the left side of the back over the region of the kidney; from here it radiates along the course of the ureter, affecting the genitals and especially the head of the penis. It also passes over to the pit of the abdomen. The attacks are usually accompanied by nausea and vomiting, and as I have said, have compelled him to remain idle, for the reason that engaging in work increases the frequency of the onsets.

Now what is wrong with this man? His heart is good. His liver, lungs and spleen are normal, as far as we can make out. There is no pain or pressure over the stomach, but a little over the region of the abdominal ganglia. His urine, upon examination, is found to be amber-colored with a specific gravity of 1.014, and of ordinary quantity. Neither albumen, sugar, pus, blood, nor casts can be found. This is the first time that I have seen the patient but I have been corresponding for six months with the physician who brought him here; and the question in our minds has been as to whether this is not a case of renal calculus.

The symptoms of renal calculus are occasional paroxysms, occurring at irregular intervals of excruciating pain, giving rise to nausea, vomiting, great exhaustion, cold sweat, and demanding subcutaneous injections of morphia. The pain follows the course just mentioned as occurring in this man. A little blood often succeeds an attack, the result of a laceration of the delicate and highly sensitive walls that bound the irritant mass.

But we have here no especial tenderness of the kidney on pressure, nor any other evidences of an inflammatory process.

However it is quite possible for a calculus to be in the kidney without an accompanying calculo-pyelitis. When such inflammation exists we find in the intervals between the exacerbations that the patient passes urine containing pus. In the urine on standing will be seen a whitish deposit composed of pus and leucocytes, whilst the supernatant fluid will yield a small amount of albumen, the result of the pressure of pus. The patient will micturate frequently but the amount will not be increased. Deep pressure on the kidney gives rise to pain, and if the patient is jolted in carriage or car, or in going down stairs, he is likely to experience a sharp stabbing pain caused by the stone's irritating the mucous membrane surrounding it. Here none of these conditions obtain, so there cannot be pyelitis.

But as I have said its absence does not exclude the possibility of a stone in the kidney. I have laid open a kidney which contained no less than twenty-five stones, yet there were no signs of inflammation.

In the present instance, then, either there is no calculus or there is one embedded in the substance of the kidney.

Could this trouble arise from any other cause than a stone in the kidney? Could it be gastralgia? The location of the pain is not altogether opposed to gastralgia, yet in that malady the pain never extends to the genitals. Neither is there hematuria in gastralgia To produce such a result there must be a laceration of some kind. Furthermore, there are no symptoms of gastric derangement. Rest and quiet have had no effect, but attacks have occurred at intervals of three or four weeks ever since last May. We can find no other explanation and I feel just as confident as if I saw it that there is a calculus in this man's left kidney.

Now if the symptoms of pyelitis were present we could with certainty expect to find, on cutting down, a stone in the pelvis of the affected kidney. This operation is not difficult and is almost invariably successful. But the offending body is not in the pelvis, it is situated somewhere in the substance of the kidney proper, and opening the kidney to remove a calculus or removing the kidney itself, is an operation of too serious a character to be lightly entered upon. The man's condition does not warrant so capital an operation. His physical condition is excellent; his health, generally speaking, good; and he has every appearance of a well man.

We shall give him time, in order to see if the stone will not become encysted. Should the attacks become so frequent and severe as to render life a burden to him, then it would be proper to operate. Meanwhile he shall be given absolute rest, have free diluents and alkalies, such as bicarbonate of and salicylate of sodium, in quantities sufficient to keep the urine nearly neutral. He must be extremely careful to avoid anything that would be likely to cause congestion of the kidney, and with this treatment it may happen that the calculus will become encysted, and cause him no further trouble.

Typhlitis and Perityphlitis.

I have lately spoken about a number of the different complications that may occur in typhoid fever. The patient just brought before you illustrates a complication which I failed to mention—typhlitis and perityphlitis.

This young man was attacked with typhoid fever on September 9, he was admitted to the hospital on the 22nd of that month, and he is therefore now in the ninth week of his malady. The attack was not a severe one. His temperature at no time high; convalescence began,

and a speedy termination was expected, when, on October 8, he was seized with the complication to which I have just called your attention.

His treatment up to this time had been quite simple: Rigid diet was enforced, nitrate of silver, bismuth and belladonna were given. Later turpentine was prescribed, the nitrate of silver being kept up.

When we call to mind the close anatomical association of the different parts here concerned, the wonder is that this complication, though not uncommon, does not oftener occur.

There is still in the right inguinal region an area of considerable hardness, which I can easily map out by palpation, but fortunately everything indicates that there is no tendency toward suppuration. For the last ten days his temperature has not been above 99°, and accordingly with this absence of fever we do not expect an abscess but confidently look for a speedy termination by resolution.

He has been kept, of course, at rest, put on a liquid diet, and occasional blisters have been applied.

Diffuse Endoarteritis.

Three weeks since this man came here complaining of a temperature which had continued persistently high for three weeks before that time. At first we hesitated in our diagnosis between malaria, walking typhoid, and incipient phthisis. But finally we came to this conclusion: the high temperature was due either to an irritability of the bowels evidenced by loose stools, or else to some marked disturbing process connected with the vascular system. The bowel trouble having been corrected and the temperature still continuing as it had been, this suspected factor was eliminated.

We found that the patient had fugitive pains about the left shoulder, a rapid pulse, hard arteries, and, if I may so term it, a slight murmurish condition of the heart. On the strength of these symptoms our diagnosis was a mild diffuse endoarteritis. If the murmur had been more marked, we should have said endocarditis.

A case like this it is highly important to recognize at the beginning. If allowed to go on endocarditis and contracted kidney will follow with all their attendant dangers and evils.

His treatment was the same as if he were suffering from an incipient attack of endocarditis, and his temperature which had persistently averaged about 100.4°, was reduced to 99°. He now comes back after a two weeks' absence for further treatment.

Upon listening to his heart I discover that the murmur is more morbid than before, so marked that beyond question this man has an advancing valvulitis.

His treatment will be blisters over the region of the heart, twice a day there will be rubbed into the skin, alternately in the axilla and the groin, twenty grains of blue ointment; and in addition he will be given fifteen grains of bromide of potassium three times a day.

Acute Bright's Disease.

Here is a laboring man æt. 44 years. His family history is good. He is married and has fine healthy children, and admits no venereal disease. In fact he says that up to five weeks since he had never known what a day's sickness was.

We find that his habits, however, are not so good as his history, since he tells us that for twenty five years he has been using whisky to excess. During that period every two weeks, almost regularly, he has gone on a spree Saturday night, though he claims that he was never unfit for work Monday morning.

There is also a history of an attack of acute articular rheumatism seven years since, with swollen joints and the other concomitants.

To come down to the present trouble we are told that five weeks ago he became overheated while at work out of doors in the wet, and caught a severe cold in the chest, giving rise to a violent cough and much pain.

In spite of this affection he continued working in the rain for four days, when he noticed that his legs were beginning to swell and to pit on pressure, and that he was compelled to pass his water more frequently than ordinary. In addition to this the pain in his chest became so much more marked that he was forced to stop work.

Now you do not suppose that five weeks ago he was perfectly sound, anatomically speaking. Perfectly healthy people are not seized in this sudden and violent manner; they are not subject to much true sickness, at least not without very exceptional cause. You may say that working four days in the wet was exceptional cause, and so it would have been for you or for me, but it was not for him, he was used to it.

This man's constitution, before he began to impose on it, must have been of iron. He was built to last a hundred years. He is a good type of the class of men that most frequently come before us, men who are habitual users of alcohol. They are the ones who are persistently sapping their vitality, and rendering themselves fit subjects for the first severe illness that may chance along. Again, made careless by this very habit, it is they who are most likely to take foolish risks and to expose themselves unnecessarily.

Five weeks ago this man was not well, no matter what he may think or say to the contrary. His arteries were irritable; his heart and his kidneys were affected by this long series of debauches. How much they were affected I do not know, but everything was just in trim for an attack of acute Bright's disease.

This was brought on by the exposure to which we have referred, yet in spite of the violence of the attack his iron frame enabled him to continue at his work for four days before he succumbed.

I now find enlarged arteries, radials, temporals, all enlarged, coats thickened and indurated—a condition of general endoarteritis. As yet there is perceptible change in the cornea. Auscultation reveals a thumping first sound with a heavy impulse. There is an altered

mitral and a small patch of pericarditis. His urine contains much albumen and many casts.

Thus we see that though this man thought himself well five weeks since, yet he had a long standing endoarteritis, increased blood pressure, and irritable and excited heart and kidneys. Suddenly a tremendous congestion occurs, and the disease breaks forth with the utmost violence, but that is merely the explosion of a carefully prepared mine. The train has been laid long before, and the only thing lacking was a spark of sufficient intensity.

We can never get his arteries back to a normal condition, but we may be able to restore his kidneys to a state of health, though perhaps years will be required to accomplish this.

The patient before us is but an illustration of what the last one would finally come to, if the morbid process now going on in him were allowed to advance unchecked.

We shall put him on the same treatment of mercurial inunctions, with occasional dry cuppings over the region of the kidneys. Internally he shall be given potassium iodide, potassium bromide, and small doses of aconite. He must be put at absolute rest, and kept from danger of chilling by having warm, dry bedding and clothes, and his diet will consist mainly of milk and cereals.

ORIGINAL ARTICLES.

TREATMENT OF PSOAS ABSCESS BY EARLY ASPIRATION.

BY HARRY HODGEN, M.D., ST. LOUIS.

This method of treatment for psoas abscess where there is no sequestrum is old, but I think has been neglected. There are three methods of dealing with psoas abscesses. The one usually adopted by the general surgeon is that of the early opening and thorough drainage of the cavity; the second, that by aspiration, early and frequent; the third, the one made use of by the most conservative, letting the abscess alone. The first method is handicapped occasionally by the fact that the abscess can be made out long before it is possible to reach it with a knife. If it were possible on all occasions to reach these abscesses as soon as they had formed, containing perhaps a dram or two drams of pus, there would be little objection to this method; but this is impossible. The principle objection to allowing the abscess to take its own course, I think, may be summed up as follows:

In the first place, there is continued destruction of tissue; second, there is interference with the functions, perhaps not very marked, but still some; third, there is a little inconvenience to the patient and I think the abscesses are sometimes painful; fourth, we do not know where the abscesses will burrow or point. It may burrow under Poupart's ligament, in the gluteal region, or in the groin, and do no harm. Yet it may empty into the bladder or intestine, or, as I believe occurred in one of my cases, it may open into the cavity of the hip-joint.

Dr. H. H. Mudd, of St. Louis, and myself have now treated five consecutive cases of psoas abscess depending upon spondylitis. Aspirated from three to five times and in each case the result has been good. The history of one case is the history of all, excepting with regard to the number of aspirations. One case was that of a young lady, æt. 16 years, in which we withdrew on the first aspiration about 500 c.c. of pus. She was kept in bed and at the end of four or five days, 50 c.c. more of pus was withdrawn. She was put in a solid plaster-of-Paris jacket. I saw her one year after the jacket had been removed. She had worn the jacket two years and had had no trouble whatever. There is no spasm of the psoas and absolutely no evidence that there has ever been a collection of pus in the muscle. Another, which is the smallest amount of pus I ever withdrew from an abscess, was the case of a child, æt. 3 years, with spondylitis of the lower dorsal region. The collection of pus was in the head of the left psoas and was not positively made out by palpation. I felt that there must be pus from the spasm of the muscle and I thought that I could make out fluctuation. Upon introducing the needle from behind I withdrew not more than one dram of pus. This was four years ago. One year ago the patient was at my office and there was no evidence whatever of any pus nor of there ever having been any pus. I do not think that anybody will claim that this is an absolute cure for psoas abscess, but that it is possible after aspirating a psoas abscess that it may stop at this point if there is no sequestrum. However, it may not. We may have to repeat the aspiration four, five or seven times. Beyond this I would not go. Believing that either the operation was doing no good or that the presence of sequestrum prevented the healing of the part, I would supply some spinal support, probably a steel one, allowing the abscess to take care of itself or opening it freely. But I believe that in some cases the condition may be changed by aspiration from a very uncomfortable to a comparatively comfortable one. By aspirating the abscess the same result takes place as if it were allowed to open spontaneously. It is drained and may heal before any more destruction of tissue takes place. In case this result does not interfere with allowing the abscess afterward to empty itself in its own way, nor does it interfere with opening the cavity by free incision, I think it should be done in every case. If it does no good it certainly will do no harm, as the procedure is unattended by any great danger. I am aware that most orthopœdic surgeons will disagree with me in regard to this point. They will say that it is an old procedure, and has been tried and found wanting. This may be true in the majority of cases, but if the early aspiration prevents the refilling of the pus cavity, if in one case out of ten it has done good, it is worth the surgeon's time to give the

patient the benefit of this one chance. The let-alone method of treatment may suit some men, but the method of early aspiration or early opening and drainage is the best one. When an abscess is high up in the head of the muscle it can be reached from behind by getting outside of the transverse process of the vertebra and about the crest of the ilium, being careful, of course, to guide the needle by having one finger upon the abscess in front and introducing only just far enough to reach the pus cavity. About Poupart's ligament they can be reached by entering the needle below the anterior superior spinous process of the ilium, being careful to keep the point of the needle directed upward and a little outward, so as to avoid the vessels, the abscess in the meantime being pushed by the fingers of the other hand downward and outward toward the needle. In the case referred to, of the probable perforation of the abscess into the hip-joint, the patient was a boy, æt. 6 years, who came to my clinic, limping, and having evidence of hip-joint disease. There was a sinus of the ischio-rectal region which at first I took for an ordinary fistula in ano; but on probing I found that it ran upward and outward instead of toward the gut. The probe did not enter far enough to reach the joint. A week or two later a sister of the patient, who could speak English, came with him, and gave his history. She said that some time before the boy had had a swelling in the right leg, extending up to the crest of the ilium, and when it reached to near the anus it broke and the swelling went down. About this time the patient commenced to limp. It was on account of the limp that the child was sent to me and not because of any trouble with the back. The child now has pretty well-marked Pott's disease in the lower dorsal region. I have two theories to offer in explanation of the hip-disease. The first and most probable one is that the pus burrowed and ulcerated through the cartilage which later in life goes to form the three bones of which the acetabulum is composed. If this was not the case it is probable that the pus followed the psoas muscle and set up a bursitis which connected it with the joint, causing the trouble. It is the only case in which I have been able to trace with reasonable certainty a connection between the psoas abscess and the disease of the hip joint by perforation. That this treatment will save some patients a great amount of inconvenience, destruction of the tissue, and avoid uncomfortable complications, I am positive. It certainly would be well in each case to try it. Do not wait until you have a large cavity to deal with if you can possibly avoid it.

Hard to Please.—*Indignant Physician:* Man, what have you done? You sent my patient the wrong prescription, and it killed him. *Druggist* (a calm man, accustomed to abuse): Vell vhat vas der madder mit you? Last veek I send your odder patient der righd berscription, and dot killed him. How can somebody blease sooch a man?

REPORT ON PROGRESS.

OTOLOGY.

BY DR. J. B. SHAPLEIGH, ST. LOUIS.

Operation on the Auricle.

At the Philadelphia County Medical Society, September 11, Prof. Keen described an operation which he had performed upon a youth whose ears were too prominent to suit his taste. A spindle-shaped segment of skin was removed from the back of the concha, and a wedge-shaped piece of the cartilage; care being taken not to cut through the integument in front, which would cause a scar, or to remove any of the anterior surface of the cartilage, which would cause puckering of the skin in front. The ear was then bent back until the surfaces of the cut in the cartilage were brought together, and the skin was united by sutures. Photographs were shown representing the patient previous to and after the operation, and the improvement was manifest.—*Times and Register*, Sept. 11, 1889.

Tuberculous Infection through Ear-Rings.

A case is related in the *Wiener Med. Presse* of a young girl, æt. 14 years, of a perfectly healthy family, who wore ear-rings left to her by a friend who had died of pulmonary tuberculosis. Soon ulcers appeared on the lobes of both ears, the cervical lymph-nodules became swollen, and percussion revealed dulness at the apex of the left lung. Tubercle bacilli were found in the ulcers and in the sputa. It was presumed that the ear-rings were the agents of infection.—*N. Y. Med. Rec.*

Green, J. Orne, on Malignant Disease of the Ear.

Diagnosis of malignancy in three recent cases of aural disease was made from the clinical history. No opportunity offered of making microscopical examination.

The general character of the progress of the disease consisted in pain with sanious discharge coming on in an ear previously suffering from chronic otorrhœa. Dark granulations, intensely sensitive, sprouted up from the tympanum, gradually followed by swelling of the mastoid region and also in front of the auricle; the swellings being hard and nodular, increasing steadily in size. Caries of the temporal bone began at an early date, attended with steady breaking down, the bone being very friable. Toward the close of the disease these swellings broke down at one or several points. Operations early in the disease relieve the pain, which when it returns is less sharp and constant than before, but is characterized as heavy and grinding. The length of the disease varied between eight and fourteen months. Removal of carious bone, cleansing, antisepsis, and drainage were chief in treatment. No glandular enlarge-

ments were found in these cases.—*Boston Med. and Surg. Jour.*, July 18, 1889.

Bronner, A., on Pilocarpine in Deafness.

I have used pilocarpine in many cases of deafness, and in some with very good results. At present I have a girl, æt. 12 years, under treatment who is suffering from a subacute affection of the middle and internal ear. After twenty injections of pilocarpine she can hear the watch with the right ear at twenty inches and with the left at six inches, and hear "whispers" (ninety-nine) at more than five meters with either ear. Before treatment she could not hear the watch at all, not even on contact, and loud speech (ninety-nine) at two meters. There is a history of congenital syphilis.

As far as my experience goes, the following classes of cases seem to be the most suitable for treatment by pilocarpine: 1. Deafness caused by acquired or inherited syphilis, due to changes either in the internal or middle ear. These seem to be the most successful cases. 2. Deafness due to hæmorrhage or exudation into the internal ear. 3. Cases of chronic catarrh, with recurrent exacerbations. 4. Cases of sclerosis or dry catarrh, but only in the initial stages. Normal hearing is very rarely restored in this class of cases, but one can frequently arrest the progress of the disease.—*Lancet*, Sept. 28, 1889.

Sexton on Autophonia.

From notes by Robert Barclay. This perception of one's own physiological processes of phonation, deglutition, respiration, circulation and mastication is due to a disturbance in the equilibrium of tension in the transmitting mechanism of the ear. Sound reaches the auditory nerve by two courses, by the air and through the tissues of the neck and head. Phenomena of autophonia are met in nearly all diseases of the external and middle ear; and in those of the inner ear that disturb the auditory tension. Dislocation of the malleo-incudal joint and alteration in the tension of the membrana tympani are the two conditions that most frequently cause this phenomenon. Audition by tissue conduction varies inversely to that by normal aerial transmission. In persons partially or totally deaf, who can hear their own voice, the mouth trumpet and acoustic fan are of service.

Catarrhal inflammation of the tympanum, especially during the course of consumption or diabetes, produces very characteristic forms of this symptom that are very distressing. They manifest themselves after a slight movement of the head, coughing, blowing the nose, yawning, swallowing, or eructation; these change the auditory tension and produce changes in audition.

Sometimes the subjective sounds prevent perception of external vibration, or so confuse them as to create mental distress more or less extreme. Prognosis under proper treatment is favorable.—*Med. Rec.*, May 9, 1889.

The Thermo-Cautery in Mastoid Periostitis.

Dr. E. Meniere, in the *Centralblatt f. Chirurgie*, advises the use of the thermo-cautery in periostitis of the mastoid process in place of the method of incising the skin, as advocated by Wilde. The affection frequently follows both acute as well as chronic otitis of the middle ear, and will be recognized as a most painful swelling back of the ear. An incision made with the thermo-cautery is superior to the old method of treatment for the following reasons: First, there is no bleeding; second, no anæsthetic is necessary; and third, the danger of infection is avoided. Meniere has successfully treated fifty-six cases in this way, in eleven of which the disease was primary. Should the opening of the mastoid process subsequently be necessary, the wound produced by the thermo-cautery may be enlarged and the bone opened through it.

Regarding the latter operation, Ricard, in the *Gaz. des Hopitaux*, No. 23, 1889, discards all trephining instruments, and advocates the use of hammer and chisel. He also claims that better results will be obtained if the anterior portion of the process be opened into instead of the posterior. The skin should, therefore, be desected away from the back toward the front.—*Med. News*, Sept. 14, 1889.

Wound of the Membrana Tympani by a Twig.

Dr. E. Meniere gives an account of this not very common accident (*Annales des Maladies de l'Oreille*, May, 1889). A gentleman, in hunting, forced violently the twig of a lilac brush into his right ear. Immediately he experienced severe pain and a metallic ringing sound in his ear. The latter sound gradually faded away after lasting some seconds. The patient also became dizzy and confused in his head, and so deaf as not to hear the report of guns near him. A little later the direction of sounds was altered so that sounds on his left side appeared far off and from the opposite side. The sharp pain in the ear ceased, but the confusion and the buzzing in the head and ear continued, even appearing intensified when in the cars and in the noisy streets of Paris, after the patient's return home. At the time of the accident some blood came from the ear, and for a week afterward the cotton which was kept in the meatus was stained with blood and yellowish serum. There seems to have been no suppuration.

For four days there was great sensitiveness to all sounds, and the patient remained in his room. In the course of a week all discharge of blood and serum ceased. But the patient remained deaf and then sought the advice of Dr. Meniere.

The latter saw the patient for the first time about two weeks after the accident. A round perforation was found in the inferior part of the right membrana tympani. There was a slight mucous deposit in the drum cavity, but no purulent discharge. The edges of the perforation were sharply defined, the perforation being

three millimeters in diameter. The membrana was very slightly hyperæmic. After having cleaned the canal and the drum-cavity with an antiseptic wash, the canal was tamponed with boric acid cotton. Under this form of treatment the perforation healed and the hearing be came nearly normal in the course of a month.

The sudden deafness in the uninjured ear is explained by the synergic action of both the tensores tympanorum, and of binaural sympathy. Such phenomena have already been noted by Gelle in the course of his studies in experimental physiology.—*Amer. Jour. Med. Sci.*, August, 1889.

On the Treatment of Aural Exostoses.

Geo. P. Field, M.R.C.S., President of the Otological Section of the British Medical Association, presented a paper with the above title at the annual meeting of the society held in August, 1889.

"The rarest form of aural exostosis consists simply in a general thickening of the walls of the osseous meatus." Those met in practice generally affect only a limited area of the meatus. Their cause is some local irritation in the ear—"active in the case of rapidly growing, pe dunculate forms, slight but long continued in the rarest and slowly-developed ivory-like tumors."

The irritation from salt water in the ear is a frequent cause. There are no conclusive data for the supposition that syphilis, scrofula, gout, rheumatism or heredity are special determining causes.

The practitioner's first duty is to try to ascertain the cause and remove it. Next to consider the question of operation, its necessity and the time it should be un dertaken.

"My experience is that it is far better to operate whilst there is room left to guide the drill, should that be required. The danger and difficulty of operating when the ear is completely occluded are very great."

The author prefers the dental engine and drill to the mallet and chisel, and finds it "uniformly satisfactory." —*Brit. Med. Jour.*, August 24, 2889.

New Antiseptic Artificial Tympanic Membrane.

Dr. John Ward Cousins in presenting a new artificial drum-head gives the following as the essential qualities demanded in a perfect one.

1. It must, first of all, decidedly improve the hearing power.

2. It must be so constructed that it can be easily placed in the right position and easily removed; it ought also to be especially adapted for self application.

3. It must be extremely light and delicate in structure, so that it causes no sensation or irritation in the meatus by its presence.

4. The artificial drum-head ought also to be an efficient protector to the injured organ, and a screen for maintaining the moisture of the exposed tympanic cavity.

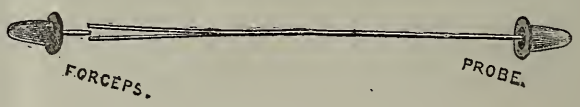
5. It should be capable of fitting the varying capacity of the external meatus, so that, when once placed in position, it is not liable to displacement.

6. It ought to be a convenient vehicle for the application of local astringent and deodorizing remedies.

7. The contrivance should be obtainable at a trifling cost, so that a new artificial membrane may be used as often as necessary.

To secure these objects he has constructed an appliance closely resembling a steeple-crowned hat with a short projection from the brim. "The material is compressed cotton fibre, swollen by prolonged immersion, and saturated in an antiseptic oil and ether." It is then pressed into shape and dried.

The special claims made for this drum-head are: Its extreme lightness, ease of self-application and antiseptic qualities. It is applied and removed by means of a combined probe and forceps as shown in the figure.



Hearing without Drum-Head or Ossicles.

C. F. Clark, M.D., Columbus, Ohio, reports a very interesting case in which a fair degree of hearing was maintained in spite of the total loss of the drum-head and all of the ossicles. "The fenestra ovalis was apparently closed by a pellicle or membrane which retained the perilymph."—*Arch. of Otology*, vol. xviii, Nos. 3 and 4.

Rare Case of Auditory Reflexes.

In the same number of this journal, Steinbruegge, of Giessen, presents an extraordinary case of convulsive attacks induced by auditory irritation.

The attacks are thus described:

"They began with a cold sensation, which rose from the knees to the stomach, or with a general rigor, then after a few long breaths the respiration became shorter and more rapid, (as high as 60 in a quarter minute). It then ceased entirely for a short time, and following this came irregular breathing, occasional yawns, and deep, heavy inspirations. The same chain of phenomena was repeated after a while with diminished severity and duration. The patient meanwhile was conscious, heard well, executed motions, as suggested to him, but could not speak. Immediately after the attack patient could only stammer but shortly recovered full power of speech."

It is remarkable that musical tones only, and not noises, could produce these attacks but this was carefully determined.

The case seemed to be "essentially one of respiratory spasms due to reflex irritation of the respiratory center in the medulla through the auditory nerve." The hypoglossal seemed also to share in this irritation.

From the different effects of noises and musical tones the author considers this case to support the view that sensations of tone and of noises are conducted to the central organ along different nerve paths, but the reader is referred to the article itself for the physiological deductions to be drawn from the case.

After a single hypnotization and the suggestion that the spasms would not recur in the future, the attacks, which had lasted 15 years, did really cease, and up to the present time have not returned. The patient is now entirely insensitive to musical impressions; he can even blow on a harmonica without unpleasant consequences."

An Injury of the Auricle, Leading to Periostitis of the Mastoid.

A man, æt. 20 years, was lifted by his auricle. He soon experienced intense pain behind the auricle, followed by swelling behind, and œdema in front of the ear, and beneath the eyelids, with fever. The swelling behind the ear was punctured with a bistoury, and some drops of pus escaped. Recovery ensued in fifteen days. —Dr. Thomas Barr, *Edinburgh Med. Jour.*, Jan., 1889; *Amer. Jour. Med. Sci.*, Aug., 1889.

Fracture of the Membrana and of the External Auditory Canal.

This was observed in a woman, æt. 50 years, who had inserted a pin into her ear. Fruitless efforts were made to extract it. Examination revealed a small prominence at the lower part of the frame of the drum membrane.

This prominence was extracted by unskilful hands, and proved to be, not the pin but "two little bones."

The explanation of this case, as rendered by Dr. Barr (*Edinburgh Med. Jour.*, January, 1889), seems to be that "the pin never entered the auditory canal, but fell from the patient's hands to the floor. The physician who first examined the ear, being misled by the patient's fear and erroneous impressions, believing he saw the pin seized the border of the annulus tympanicus, and by his undue efforts at extraction of the supposed pin, fractured the bone.—*Amer. Jour. Med. Sci.*, August, 1889.

A New Pathogenic Mould Fungus in the Human Auditory Canal.

M. Lindt, of Berne, describes what he terms a new fungus in the human ear, and calls it the *Eurotium malignum.* The other forms of pathogenic fungi hereto fore described are the *Aspergillus fumigotus* (Fresen); *A. flavus* (Brefeld, Wreden); *A. niger* (v. Tilghem, Wreden), and *A. nidulus* (Eidam, Siebenmann); to which the author claims to add a fifth.—*Arch. f. Ex perimentalle Pathologie u. Pharmakologie,* Bd. xxv., and *Arch. f. Ohrenh.*, Bd. 28, June, 1889; *Amer. Jour. Med. Sci.*, Oct., 1889.

F. Siebenmann, of Bale, publishes in the *Arch. of Otology*, vol. xviii, Nos. 3 and 4, a synopsis of 53 cases of ostomycosis occurring in the practice of Prof. Bezold, of Munich. He reports a form hitherto not described. The penicillium mucor septatus, and includes a case of otomycosis mucorina coryambifer, the second on record.

The author considers the Graphium penicilloides and the Tricothecium roseum as included in the Verticillium graphii Harz et Bezold. Different species of mould are not found together in the same, and in bilateral cases the same species is found in both ears.

A decrease in the frequency of otomycosis during the last years is shown and the importance of instillations of oil into the ear as a cause of the affection is confirmed.

Treatment with 2% salicyl-alcohol apparently offers sufficient guaranty against relapses.

Common Ear Diseases.

The *Md. Med. Jour.* concludes in the number of October 26, 1889, a series of seven articles by Dr. Hiram Woods, of Baltimore, on the "Treatment of Such Ear Diseases as are Usually seen by the General Practitioner." Space forbids any extended synopsis—but the author has put in an easily accessible form a fund of information about the ear which the general practitioner will find very useful. These articles may be obtained in book form from the publishers of the journal.

Excision of the Membrana Tympani and Malleus.

Charles H. Burnett reports a case of suppuration of the tympanic attic with slight persistent discharge, in spite of ordinary treatment which was cured by the removal of the membrana tympani and malleus. "The head of the malleus was found half destroyed by necrosis on its free surface." The hearing which had been nil rose eventually to "nine feet for isolated words in ordinary conversational tone."—*Med. News*, November 2, 1889.

Quinine Deafness.

Dr. I. E. Atkinson in an article on Cinchonism, thus explains the action of quinine on the ear. "Very singularly the effects of quinine upon the sight and hearing appear to be attributable to two quite opposite conditions. Upon the ear the action is decidedly hyperæmic, upon the eye it is even more pronouncedly anæmic. How these changes are induced is quite unknown. It is generally assumed that they depend upon influences exerted through the vaso-motor center.

Regarding the ear, Kirchner concludes that the cause of the pathological changes after quinine is probably a vaso-motor disturbance whereby not only transitory alterations are excited, but also a paralysis of the vessels with congestion and exudation in the different parts of the organ of hearing. With this condition of the aural blood-vessels concurring, it seems difficult to refer the

alterations to a central vaso-motor lesion. It is altogether more probable that the vaso-motor effects are local."

As to the permanent effect of quinine upon the hearing he says: "So far as I have been able to ascertain, permanent complete deafness from quinine has never been reported; indeed, complete temporary deafness is exceedingly rare."

That quinine is capable of producing complete permanent deafness in a normal ear has not, I think, been shown, but that it may accelerate a pathological process the foundation for which already exists is probable and certainly its temporarily injurious effect upon many aural affections is admitted. Though occasionally of service in anæmic cases it is a drug whose use in aural therapeutics is very limited.—*Jour. Amer. Med. Assoc.*, Sept. 28, 1889.

ABSTRACTS.

BY WM. N. BEGGS, M.D., ST. LOUIS.

Lumbago.

Dr. Evan Hadley, in *Indiana Med. Jour.*, classifies lumbago etiologically as from:

1. Strain in rheumatic subjects.
2. Direct strain.
3. Continued cold and exposure with over exertion.
4. Stricture of urethra.
5. Syphilis.
6. Renal disease.

In treatment, a knowledge of cause is important. Anodynes are indispensable, hypodermatic injections of morphine and atropine being especially useful. In strain or acute rheumatism an immovable apparatus may be necessary. In a majority of cases, however, strapping with adhesive plaster or a close fitting flannel bandage is sufficient. Anti-rheumatic treatment is also often beneficial.

Gastro Enteritis of Children.

E. P. Davis, M.D., *Med. News*, says: In mild cases the food should be withheld for a short time. A warm bath may be administered with advantage. Drinking water should always be boiled, and only small quantities at a time be given.

In severer cases recourse may be had to the following measures:

The stomach may be washed out with very weak solutions of antiseptics, or, preferably, boiled water.

As an antiseptic one twentieth of a grain of calomel with soda or saccharum lactis may be given every half hour until its effects are noticeable in the fæces. If this is not sufficient the intestine should be washed out with warm water. If there is tendency to collapse a little warm water and whisky may be left in the bowel.

To control temperature warm or hot baths, together with cold applications to the abdomen, are advisable. No internal antipyretics should be thought of until this has been tried and failed.

Peroxide of Hydrogen in Pneumonia.

Dr. J. L. Greene, in the *Med. Rec.*, recommends the peroxide of hydrogen in the treatment of pneumonia. In the congestive stage he gives from one-fourth to one-half a teaspoonful every five or ten minutes for an hour or more. In acute lobar pneumonia he gives f℥ss every hour until after the crisis. It must be given well diluted. Dr. Greene's results are very good. He claims to have lost only one out of twenty-three cases.—*Med. Analectic.*

Use of Antipyretics in Pneumonia.

Dr. Robt. C. Kenner, in an article on "The Treatment of Croupous Pneumonia," in the *Am. Prac. and News*, maintains that the depressing effects of antipyretics are more to be dreaded than the fever in pneumonia. The fever may be an element in destroying the disease by impairing the vitality of the bacteria giving rise to the pneumonia. The chief danger is not from the fever but from heart failure, and it may be a question as to whether the better practice is not to take care of the heart and let the fever take care of itself.

If the temperature does not exceed 103° F. no harm is done. If it passes 104° F. and reaches 106° antifebrine may be justifiable. Tepid sponge baths or quinine in antipyretic doses are preferable.

A Solvent for Diphtheritic Membrane.

Wm. C. Wile, M.D., in the report of a case of diphtheria in the *New Eng. Med. Monthly*, recommends sulpho-calcine very highly as a solvent for the diphtheritic membrane. It is to be used as a gargle with an equal quantity of water, hourly, the intervals being increased as convalescence occurs. If the membrane is very copious the undiluted sulpho-calcine may be painted over the affected parts by means of a camel's hair brush.

Intra-Pulmonary Injections of Camphorated Naphthol.

Dr. Fernet reports to the Societe de Therapeutique the favorable effects of the use of camphorated-naphthol. These results he has obtained:

1. In certain tuberculous ulcers of the tongue.
2. In certain cases of scrofulo tuberculous adenitis in which the glands have not yet undergone softening, the intraparenchymatous injection of a few drops of camphorated naphthol sufficing to bring about a rapid and noticeable improvement; and

3. The application of this same local treatment to pulmonary tuberculosis.

The pathological changes in pulmonary tuberculosis remain for a longer or shorter period, limited to a localized portion of the lung in a great majority of the cases of pulmonary tuberculosis. Such were the cases chosen for the experiments. Such experiments had already been made with iodine—iodide of potassium solutions, and with creasote and corrosive sublimate, with a view to acting upon the suppurative processes within pulmonary cavities. Dr. Fernet believed that naphthol would have a really efficacious action upon the tuberculous lesion itself. This he believed on account of the parasitic effects of the drug and the phenomena of irritation and sclerosis which it caused in animal tissue.

He made forty intra parenchymatous injections in four tuberculous patients, presenting lesions of softening in both apices, indicated by moist rales. In one case the existence of a small cavity could be determined. The injections were made once or twice a week. A Pravaz syringe, with a longer needle than usual, was employed. Each time 0.15 centigrammes of camphorated naphthol (0.05 centigrammes of pure Beta naphthol) was used. Injections were made in the intercostal space midway between the border of the sternum and the axillary line.

Twenty-two times the injections were made without producing any symptoms worthy of note. In the others various symptoms were produced, such as light pains passing down the arm, cough, due probably to the passage of camphorated vapor into the bronchi, or slight hæmoptysis. This latter was generally very slight, once only being sufficient to cover the bottom of a cuspidore. As a rule, it was indicated by slight streaks of blood in the sputum. Only once were there signs pointing to an encysted pneumothorax of the apex, and these passed away so rapidly that the diagnosis was very doubtful. As for results—three were noticeably improved, the fourth left the hospital in a moderately fair condition, but the lesions were already well advanced in his lungs. In all the expectoration was much diminished and changed from muco-purulent to purely mucous. The physical signs themselves were very much modified and the crepitant rales had entirely disappeared.

Treatment of Emphysema and Asthma by the Respiration Chair.

This is advocated by Dr. Carl Grunert in his Inaugural Dissertation at Halle. It consists in the accomplishment of forced respirstion by artificial means. The thorax is pressed backward and downward by means of a cuirass, the abdomen is compressed by a broad belt, and the diaphragm is forced to rise by the abdominal viscera. In this way expiration (and, consequently, the entire respiratory act) is rendered more complete. Better aeration ensues and bronchitic mucus is expelled. Dyspnœa is diminished and circulatory disturbances removed. In emphysematous patients the chronic bronchial catarrh is more or less diminished, and the attacks of coughing are improved. The asthmatic symptoms are also often cured.—*Med. Ree.*

Treatment of Pertussis by Antipyrin.

Dr. Rubousquet-Laborderie, in a meeting of the Paris Therapeutical Society, recommends the use of antipyrin in pertussis. He maintains that it exerts a favorable influence upon the catarrh, the specificity and the nervous elements. He has treated successfully by this means 71 out of 94 cases. The duration of the cases was reduced to 18 to 25 days. The intensity was decreased, and the attack diminished in frequency. No dangerous rssults from the medication were seen in children. Five to fifteen grains may be given to children one to three years of age, one-half to one drachm to older children. It may be given in Vichy and syrup.—*Deutsche Medizinal Zeitung.*

Epidemic of Pemphigus.—An epidemic of pemphigus has recently occurred amongst young children in Brussels, sixteen cases having been treated in the Hospice des Enfants Assistes under the care of Dr. Max. The ages of the subjects varied from two days to thirteen months. The eruption generally affected the thighs and abdomen, sometimes other parts of the surface, but never the palms of the hands or the soles of the feet. Red patches were first seen, and upon these there soon appeared bullæ, varying in size from that of a lentil to that of a walnut. Their number was usually inversely proportional to their size and to their age, and their contents, which were quite clear, did not become purulent except where the general health of the subject was bad. The cases ran a mild course, and were treated by pricking the bullæ and dusting them over with starch powder or subnitrate of bismuth. A starch bath was also given daily. No case of transference of the affection to an adult was observed, though it has been demonstrated by Vidal and by Colzat that adults can be inoculated successfully from the liquid in the bullæ, and a special bacillus has been described by Gibier.—*Lancet.*

Saccharin.—The importation of saccharin has been for some time forbidden by French, Spain, and Portugal: Italy and Hungary have now followed the example of these countries. In Belgium a duty of 140 francs a kilogramme is levied, not only on saccharin, but on all products containing more than 50 per cent, of it. In Holland a dutp of 60 florins a kilogrammo will probably soon be imposed on saccharin.

The odor of cancer can be removed from the hands by applying oil of tupentine after a thorough cleaning with water and bichloride.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,

EDITOR.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, DECEMBER 7, 1889.

THE ADMINISTRATION OF DRUGS BY ELECTRICITY.

At a late meeting of the Harveian Society of London, the proceedings of which were published in the *Brit. Med. Jour.*, Dr. Cagney read a paper on the administration of certain drugs by electricity. Eulenberg, von Bruns, and Hermann Munk have shown by experiment that certain drugs can be made to pass through animal tissues between the poles of a galvanic battery. Dr. Cagney has used iodide of potassium in this manner for cure of labyrinthine deafness and lead poisoning. He stated that this method of treatment was most applicable to diseases of the most superficial parts of the body, the skin, mucous membrane and subcutaneous tissues; only small doses, however, can be given. The indications for the method are those for the local use of iodine and potassium iodide. It is very useful in throat affections, as of syphilis and especially in chronic pharyngitis. Nodes, gummata, tubercular ulcers, mucous patches and papular syphilides yield readily whenever accessible to treatment. Other affections in which benefit would follow would be indolent ulcers, lupus acne, enlarged strumous glands, bronchocele and exophthalmic goitre.

Among the advantages he claims for this method are the following:

It is possible by its use to administer in perceptible doses a drug which is among the most useful of those available; a drug which is not tolerated by every constitution, and in a way which is least likely to disturb the system. The drug is conveyed directly to where its action is most needed, and presumably in a condition of maximum activity. The stimulating action of the galvanic current is also of considerable benefit where the lesion is caused by errors of nutrition, or where it is attended by paralysis, as in metallic poisoning. A very strong current is not needed, but it must be passed directly through the tissues under treatment. Sponges soaked in the solution may be used for electrodes, or a modification of Dubois' conducting tubes may be employed. In Munk's researches the latter gave the best results, and are to be preferred where the skin must be penetrated, in which case they must be of large size. For the treatment of mucous surfaces a glass tube may be used filled with a fluid, a fine sponge blocking up the mouth, and a zinc wire passing through the bottom connected with one pole of the battery. The fluid should be a saturated solution of potassium iodide,and should be applied at both poles where possible; if not, then at the negative pole. The current should be passed for ten or fifteen minutes, and its direction changed every minute. In strumous glands, bronchocele, etc., the positive pole might be carried beneath the skin by means of a gold needle. Where the current passed through the skin the good effects were not so apparent and still less where two layers of the skin had to be traversed by the wire.

The general tone of the discussion which followed the reading of the paper was favorable to the method and indicated that it was one of great practical possibilities. In syphilis it was of use to influence the local lesion, even where the constitutional condition had to be treated separately. Good results were to be expected in tobacco amblyopia from this method of treatment.

The pain from introducing the needles was not unbearable. It was useless to expect good results in deeplying tissues from this method of treatment.

CURE OF HÆMORRHOIDS BY INCISION.

A recent number of the *Annals of Surgery* contains an interesting article by Henry O. Marcy, M. D., of Boston, on the "Cure of Hæmorrhoids by Excision and Closure with Buried Animal Suture." Although the clamp and cautery and the ligature are generally effective in causing a permanent cure, he believes that both are radically defective and should be cast aside. "The staunchest advocates of the ligature admit that abscesses generate septic poisoning and other dangers, as secondary hæmorrhages are not wanting in the experience of the most careful and practiced surgeons." Among the objections to the galvano-cautery are the intolerable pain produced by its use, and the fact that the wounds left by it are invariably slow of repari. Secondary hœmorrhages and contractions occasionally follow its use. Crushing instruments offer but little advantage over the ligature, and, like it, produce a septic wound.

The treatment by hypodermic injections sometimes gives good results, but on the whole is uncertain and disappointing. The secondary results are often dangerous. Whitehead's operation for hæmorrhoids, which has been so much lauded, has also some objectionable features, but is a distinct step in advance of the above methods.

Marcy then proposes an operation, for which, after abundant experience, he claims simplicity, safety and exceptional results. The large intestine is thoroughly emptied, and a large injection is given a few hours before the operation. The patient is etherized and placed in the lithotomy position, after which the parts are washed by a sublimate solution and the sphincter dilated until it is paralyzed. The rectum is then washed with a sublimate solution, and a large pledget of wool, dusted with iodoform, is placed in the rectum. During the operation a solution of bichloride is kept playing on the parts. The skin and mucous membrane are divided at their junction with a sharp knife, or with scissors, without injuring the plexus of vessels. The plexus is then separated from the mucous membrane and the loose connective tissue fascia by the finger or a blunt instrument, quite deeply, cutting any connective tissue bands that may appear. The deformed hæmorrhoidal plexus being thus separated from its surroundings, except at its base, a needle with eye near the point is threaded with a tendon, introduced posteriorly behind the mass, and withdrawn; again threaded with the external end of the suture it is carried about $^1/_3$ of an inch from its first introduction, unthreaded, threaded with the opposite end and withdrawn. The stitch resembles that taken by the shoemaker drawing the waxed end of his thread from opposite directions through the hole made by the awl, the entire base being encircled by a row of deep, double, continuous sutures. The hæmorrhoidal plexus is now dissected away with scissors just above the line of sutures, and the mucous membrane is stitched by a continuous tendon suture to the line of division first made through the skin. Eiher the over and over stitch may be used, or a running blind stitch taken from side to side from within outward, which also buries the exteral line of sutures. The parts being thus restored to their normal condition, the wound is carefully dried, dusted with iodoform and sometimes still further protected by a thin layer of iodoform collodion.

He states that if properly done the operation is aseptic and is followed by primary union. Almost without exception the patient is remarkably free from pain, and the reparative processes go on rapidly. Where the operation is uncompleted, absolute restraint in bed is not necessary and the micturition is usually voluntary and easy.

Marcy believes the danger of hæmorrhage from excision is much exaggerated. The operation is simple and easy to do after a little experience. There is no arterial hæmorrhage to be arrested. Necrosis is avoided and the wound aseptic. The advantages over Whitehead's operation are: first, constriction of blood vessels before division, which certainly diminishes the loss of blood and ensures against secondary hæmorrhage. Second, a much more accurate and easy mode of readjustment and closure of the parts. Third, continuous animal sutures, which are buried and incorporated into the tissues, have a decided advantage over the interrupted silk suture which is ever to be considered as foreign and, if not removed, must be thrown off by suppuration.

In conclusion he recommends tendons, properly preserved and prepared, preferably those from the tail of the kangaroo, catgut being often untrustworthy from inherent defects.

Protective Inoculation in Anthrax.

Experiments have been recently made by a Mr. E. H. Hankin (*Brit. Med. Jour.*) upon a number of mice and rabbits, with an albumose which he has isolated from anthrax cultures. A large quantity of absolute added to the culture fluid precipitates the albumose, while dissolving the soluble ptomaines; the precipitate is then filtered, dried, redissolved and again filtered through a Chamberlain's filter. From one five-millionth to one ten millionth of the animal's weight was injected. On inoculating an animal with anthrax after a large dose of the albumose the fatal termination was hastened. Small doses of the albumose seemed to exert a protective influence. With medium-sized doses the anthrax bacilli gradually gained a foothold and at length by producing more albumose overcame the animal power of resistance.

The albumose is slowly excreted and seems to be able to suppress the germicidal powers of the animal.

The experiments were all made in Koch's laboratory and some were personally conducted by himself.

More accurate investigations as to the precise degree of immunity conferred by the albumose are now in order, as well as the verification of the results upon animals, in the human being. The discovery appears to be one of great importance, in spite of the comparative rarity of anthrax in this country.

Can Man Subsist upon a Diet of Meat and Water Alone?

The possibility of this is doubted by many of the foremost physiologists of the day, from the fact that they believe the digestive organs would be unequal to to such a task for any length of time. Dr. George Hershell, in a letter to the *London Lancet*, maintains the opposite opinion, and it is not merely an opinion alone, but is backed up by a very substantial argument in the shape of a family of cannibals from Terra del Fuego, who have lived all their lives on nothing except lean meat, fish and water. The family consists of five adults and two children, and at present on exhibition at the Westminster Aquarium.

The adult man, æt. 30 years, of normal weight and development, takes little or no exercise and eats every twenty-four hours, 5½ lbs. of lean cold boiled horseflesh, 2lbs. of raw fish and one or two eggs, and drinks about four pints of water at the most, probably rather less.

As near as can be ascertained he passes about the normal quantity of urine in the twenty-four hours, and a sample passed about three hours after his last meal at night yielded the following results on examination: Sp. gr. 1020; faintly acid, no albumen, no sugar, an excess of phosphates, but urea 15 grains to the ounce, and uric acid one-sixth of a grain per ounce only.

Another point in this interesting case, and to which Dr. Herschell calls attention, is that it completely disposes of the allegations of those physiologists who affirm that excess of meat in the food produces uric acid and gout. Among these meat-eaters gout is unknown.

Either text-books of physiology are not to be relied on as regards diet, and, therefore, need revision, or they are right, that is to a certain extent, so far as regards the ordinary, every-day civilized man; but that it is possible, by hereditary training and influence, to so modify the process of bodily metabolism as to still enable the individual to exist.

MEDICAL ITEMS.

Death from the Sting of a Bee.—A Dorsetshire farmer recently died of suffocation from the œdema following the sting of of a bee which got into his throat.

Sulphonal in Fractures.—Dr. Edmund Andrews has in three cases found that sulphonal in doses of 15 grains, repeated if necessary in four or six hours, controlled the painful muscular spasms in a fractured limb.

Divorces in France.—It is a curious and perhaps not insignificant fact that of the seventeen thousand odd divorces granted in France since divorce became legal in 1884, there was no issue of the marriage in 48 per cent.

Calcium Sulphide in Phthisis.—Dr. E. Houston, of the Northwestern Sanitarium, Stanberry, Mo., writes us that after nearly a year's use of calcium sulphide in consumptive cases, he can report results that are very favorable.

For the Night Sweats of Phthisis.—Rosenbach recommends that a bladder containing ice be left upon the abdomen for several hours. It is tolerated very well, and often succeeds where atropia and salicylic acid locally have failed.

The St. Joseph Medical Herald.—The November issue of this most readable journal contains a proof of the new cover-page to be introduced in January. It is an artistic and attractive design, and yet, no doubt, will be only a minor one of the many improvements to be inaugurated with the same number.

A Medical Senator.—Dr. Francisco Alonso Rubio, some time physician to the Queen of Spain, and the leading obstetrician and gynæcologist of the Peninsula. has recently been named a life Senator by the Spanish Government. The appointment has given great satisfaction to the medical profession in Spain.

The Centenary of Galvanism.—An eventful anniversary in the history of science has been allowed to pass without (so far as we are aware) any of the commemorative ceremonies now usual in honor of much less important events. On November 6, 1789, Luigi Galvani, Professor in the University of Bologna, made the first accidental observations in what we know now as "galvanism," which proved as fruitful in his mind as the falling apple did in that of Newton.

The Responsibility of Criminals where Insanity is Pleaded.—The test of responsibility when insanity is pleaded as a defence in a murder trial was clearly and tersely stated by Judge Moore in charging the jury in the McElvaine case in New York, recently: "If you believe that the defendant at the time he stabbed Mr. Luca knew the nature and the quality of the act he was doing, and knew it was wrong to do it, you must adjudge him a sane man."

A Nursing Heroine.—The spirt of Florence Nightingale lives in the person of Sister Marie Therese, Superior of the Sisters of Charity now serving in Tonquin, who has recently been decorated by the General in command. When she was barely 25 she was wounded at Balaclava. At Magenta she again received a wound. She accompanied French soldiers to Syria, China and Mexco. In the Franco Germany war she was grievously wounded at Reichshofen while attending the Cuirassiers who fell in that memorable charge. At a later stage of the same campaign she distinguished herself by seizing a bomb which fell into an ambulance, and carrying it away eighty yards, when it burst, seriously injuring her alone. She was scarcely recovered from the effect of this injury when she volunteered for service in Tonquin.

The Compatibility of Quinine.—Antipyrin is incompatible with decoctions, infusions and tinctures containing tannin; the precipitate formed contains tannic acid and antipyrin. Antipyrin is not precipitated by solutions of the alkaloids, quinine, chinchonine or cinchonidine, and may, therefore, be prescribed in a mixture containing quiniæ sulph. and acid. sulph. dil. When strong solutions of chloral hydrate and antipyrin are mixed together a white precipitate is formed, which in the course of some hours changes into a crystalline mass, from which the clear upper liquid can be drained off. This mass is an insoluble compound of chloral and antipyrin, the therapeutic properties of which (if it has any) are not known. Therefore, in prescribing the two drugs together, the solutions must be

dilute. A solution containing 15 grains of each to the ounce appears to be a permanent one.

BOOK REVIEWS.

CHEMISTRY: General, Medical and Pharmaceutical, Including the Chemistry of the U. S. Pharmacopœia. A Manual on the General Principles of the Science and their Application in Medicine and Pharmacy. By John Attfield, F.R.S., M.A., and Ph. D. of the University of Tuebingen; F.R.C.; F.C.S.; Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain; Honorable Member of Pharmaceutical Societies of Great Britain, St. Petersburg, Austria, Denmark, East Flanders, Australasia, New South Wales and America, etc., etc. Pp. 770. Illustrated. 1889. Lea Brothers & Co., Philadelphia.

An explanation of the purpose of this work is best given in the author's own words: "The short title on the back of a book, and even the words on the title-page, are generally, and even necessarily, imperfect descriptions of its contents. The author would at once state, therefore, that his chief aim is to teach the general truths of chemistry to medical and pharmaceutical pupils. So far as laws and principles are concerned, the book is a work on General Chemistry, but, inasmuch as those laws and principles are elucidated and illustrated by that large portion of chemistry which is directly interesting to medical practitioners and pharmacists, the book may be said to be a work on medical chemistry and pharmaceutical chemistry."

How well the author has accomplished the task allotted to himself is partially attested by the fact that the present one is the twelfth edition. Within twenty-two years it has grown from the modest Handbook of Practical Chemistry to its present proportions, and has, in the meantime, completely filled what would in its absence have been a much-felt want. Indeed, it has been a wide-reaching standard for the study of chemistry and pharmacy, embracing among its supporters universities and colleges on both continents.

It is eminently a practical work, avoiding the long discursive introduction on physics and allied topics that takes up so large a space in the majority of such books; and presenting for the attention of the reader what the wide experience of the author has shown will be useful in everyday work. And his discernment in this particular is most commendable.

We predict the necessity of even further editions of this worthy book.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS, VOL. IV., No. I, October, 1889.

This issue contains the following monographs:

I. The Influence of the Male Element upon the Female Organism. By John Brown, M.D., of Glasgow, Scotland.

II. The Internal and External Temperature of the Human Body as Modified by Muscle Kneading. By A. Symons Eccles, M. B.

III. The Diseases of the Breast. By Thomas Bryant, F.R.C.S., Eng.

In rendering the tribute of merit due to this number, it is almost sufficient to say that the standard heretofore maintained in the issuance of these monographs, is fully met in the present one.

The only fault that may be found with the first essay is that it is all too short to compass so interesting a subject as that suggested by the title. It gives us a taste and then drops us, with the privilege of seeking the rest for ourselves.

Since massage and muscle-kneading have come to be such prominent factors in the treatment of disease, the study of their relations to the external and internal temperature from a scientific and physiological, rather than a therapeutic, standpoint is entirely justifiable and *apropos*.

Accuracy of the records of the studies has been much promoted by sphygmographic and sphygmomanometric tracings, which are illustrated.

The greater part of this issue is naturally devoted to the essay of Mr. Bryant, the mention of whose name suffices to insure the attention it deserves. Its object is to place before the student and practitioner a clinical exposition of the abnormalities and diseases of the breast, more particularly with reference to their diagnosis and treatment. The anatomy, physiology and pathology of the organs are given the share of attention necessary to elucidate these. Engravings and chromo-lithographs are also added for the same purpose.

This is a valuable treatise, and it alone is well worth the price of the monograph.

A HAND BOOK OF DERMATOLOGY, FOR THE USE OF STUDENTS. By A. H. Ohmann-Dumesnil, A.M., M.D., Professor of Dermatology, St. Louis College of Physicians and Surgeons, etc., etc. The St. Louis Medical and Surgical Journal Publishing Co.

The preface tells us that "this small hand-book was not written to fill a long felt want, but rather as a guide to students in their reading." We must confess to a prejudice against books of this class. The danger arising from them is that the student will not use them as guides, but rather limit himself to the necessarily incomplete information contained in them. We must, in justice, add, however, that the specimen now before us is a very good representative of its class, and that it fully comes up to the modest claim of its author. The student who could convert into available knowledge all its text contains would be much better fitted than is the average practitioner to meet the demands made upon him in this field.

The few typographical errors we noticed are not such as to derogate from its value. The book is of such a

size as to be conveniently carried in the pocket, and presents an attractive exterior. J. G.

THE PHYSICIAN'S VISITING LIST (Lindsay & Blakiston's) for 1890. P. Blakiston, Son & Co., Philadelphia.

This account-book, which is now in the thirty-ninth year of its publication, meets all of the requirements for a compact yet complete visiting list. Its index shows the following contents: Almanac, Table of Signs, Marshall Hall's Ready Method in Asphyxia, Poisons and Antidotes, Metric Weights and Measures, Dose Table (revised and re-written for 1890), List of New Remedies, Aids to Diagnosis and Treatment of Diseases of the Eye, Diagram Showing Eruption of Milk Teeth, Posological Table, Disinfectants, Examination of Urine, Incompatibility, A New Complete Table for Calculating the Period of Utero-Gestation, Sylvester's Method for Artificial Respiration, Transportation of Injured Persons (illustrated), and Diagram of the Chest, besides blank leaves for visiting list, monthly memoranda, addresses, accounts asked for, obstetric and vaccination engagements, records of births and deaths, and cash account.

ESSENTIALS OF PATHOLOGY AND MORBID ANATOMY. By Armand Semple, M.D. Saunders' Question Compends.

This small work is not intended to supplant the larger and more thorough text-books on the subject of pathology. It is to be feared, however, that a great many students and so-called "busy practitioners who have no time for theory," will confine their reading to this manual to the neglect of others. In its proper field, that of assisting students to remember the most important points in general and special pathology, it is very good, better than most works of this class generally are. Owing to its size, its text is necessarily very short and terse. The wording is "catching," however, and the number of subjects treated large. The text is better than the illustrations.

A TEXT-BOOK OF ANIMAL PHYSIOLOGY, with introductory chapters on General Biology, and a full Treatment of Reproduction, for Students of Human and Comparative (Veterinary) Medicine and of General Biology. By Wesley Mills, M.A., M.D., L.R.C.P. (Eng.), Professor of Physiology in McGill University, and the Veterinary College, Montreal, 1889. D. Appleton & Co., New York.

There are many reasons why the study of animal physiology should receive the attention that is given it in this book, and more than it has been thought heretofore to deserve in this country. In the first place, the study of animal physiology has ever been intimately associated with that of the human being; has acted as its advance guard, its guiding principle; all progress in the latter has been preceded by experimentation and investigation in the former. This has necessarily been so, because of the fact that the study of the life-workings in animals is more controllable than in man; the machinery may be stopped at any stage of its action, at any period of its growth or decay; it may be restricted or hastened by medication or otherwise; it may be watched under the varying conditions of health and disease, under anæsthetic sleep or in normal consciousness, accomplished and directed at will, after suitable preparations have been made to note and record the various observations to the greatest advantage; while, if we study them in the human being, the observations must be noted at haphazard, the opportunities, few and far between, must be grasped as they are offered, and the conditions for study under such circumstances are naturally not always the best.

It is thus that the study of animal physiology has anteceded that of human physiology.

For the same reason that a preliminary training in Latin and Greek is a pre-requisite for the thorough mastery of the more modern languages, he who would learn human physiology cannot afford to neglect animal physiology, the ground-work upon which it has been built.

In America, where the dominating desire for practical progress has led our countrymen to leave for our trans-Atlantic brethren the more arduous tasks of this sort, comparatively little has been done in this direction up to late years. In 1884, a treatise on the subject of animal physiology by Dr. Billings appeared, and the author was not sparing in his comments on the backwardness of America in this department. In the early part of the present year, the work of Dr. Robert Meade Smith was issued, and was reviewed in this journal. Considering these and the present work, we must say that the charge of paucity of American literature on this subject cannot now be made with impunity.

In this work we have a treatise, which, while bearing scientific information of great value, is entertaining and attractive, comprehensive and elegant; and is presented with all the excellence of typography, binding, etc., for which this house is noted. The illustrations are numerous (505), original and well executed.

Beginning with general biology, in the first chapter, the reader is led with a seductive hand through the various topics of the cell, its nature and morphologies; parasitic organisms; the animal body—an epitomized account of the functions of a mammal; living and lifeless matter; a classification of the animal kingdom; the laws of periodicity or rhythm, and of habit; the origin of the forces of life; reproduction, and the development of the various portions and systems of the body; the chemical aspects of animal physiology; the physiology of the different tissues, of muscle, nerve, etc.; digestion, respiration, excretion; metabolism; the senses; voice and speech; locomotion; and, finally, man is considered physiologically at the different periods of his existence.

The charming style of Dr. Mills' writing adds greatly to the attractiveness of this work, aside from its value as a scientific exposition of physiological truths.

BOOKS AND PAMPHLETS RECEIVED.

Wood's Medical and Surgical Monographs, Vol. IV, No. 2, November, 1889. Containing:

I. On the Surgery of the Knee-Joint, by C. B. Keetley, F.R.C.S.

II. Aids to Ophthalmic Medicine and Surgery, by Jonathan Hutchinson, Jr.

III. Bacteriological Technology for Physicians, by Dr. C. J. Salomonsen.

Physician's Visiting List (Lindsay and Blakiston's) for 1890. P. Blakiston, Son & Co., Philadelphia.

An Improved Form of Relaxation Suture. By Newton A. Powell, M. D. Reprinted from Canadian Practition.

The Evil that has been said of Doctors. Extracts from Early Writers. By Dr. S. J. Witkosky. Translated, with Annotations, by T. C. Minor, M. D. Reprinted from the Lancet Clinic, 1889.

Foods for the Fat. A Treatise on Corpulency and a Dietary for its Cure. By Nathaniel Edward Davies, Member of the Royal College of Surgeons, England, J. B. Lippincott Co. 1889.

Overstrain and Under-power of Brain. By C. H. Hughes, M. D., of St. Louis, Mo. Reprint from the Alienist and Neurologist, October, 1889.

Highway Improvement. An Address by Col. Albert A. Pope, of Boston, before the Carriage Builders' National Association, at Syracuse, N. Y., Oct. 17, 1889.

A Plea in Favor of Early Laparotomy for Catarrhal and Ulcerative Appendicitis, with the report of two cases. By N. Senn, M. D., Ph. D. Reprint from Journal American Medical Association.

Essentials of Pathology and Morbid Anatomy. By Armand Semple, M. D. W. B. Saunders, Philadelphia.

The Therapeutical Applications of Peroxide of Hydrogen and Glycozone for the Treatment of Chronic and Contagious Diseases. By Charles Marchand, Chemist and Graduate of the Ecole Centrale des Arts et Manufactures de Paris, 1889.

Some Practical Hints in Connection with Intubation of the Larynx, and a Resumé of 206 cases operated on from 1886 to 1888. By J. Mount Bleyer, M. D. Reprinted from the New York Medical Journal.

Preferable Methods of Fixation in the Treatment of Simple and Compound Fractures of the Leg. By N. A. Powell, M. D., Toronto. Reprinted from the Canadian Lancet.

The Cure of Crooked and Otherwise Deformed Noses. By John B. Roberts, A. M.. M. D., Professor of Anatomy and Surgery in the Philadelphia Polyclinic. Lecturer on Anatomy in the University of Pennsylvania. Surgeon to St. Agnes Hospital.

Concealed Pregnancy; Its Relations to Abdominal Surgery. By Robert Vanderveer, M. D., Ph. D., of Albany, New York. Surgeon to the Albany Hospital; Consultant Surgeon to St. Petersburg Hospital; Professor of Didactic, Abdominal and Clinical Surgery in the Albany Medical College; Fellow American Association of Obstetricians and Gynæcologists, etc. Reprinted from Journal American Medical Association.

The Cure of Hernia by the Use of the Buried Antiseptic Animal Suture. By Henry O. Marcy, of Boston, Mass. Surgeon to the Private Hospital for Women, Cambridge; President of the Section of Gynæcology, Ninth International Congress; late President of the American Academy of Medicine; Member of the British Medical Association, etc. Reprinted from Journal of American Medical Association.

Chronic Inversion of the Uterus.Reduction by a New Method. By the same. Reprinted from the Journal of American Medical Association.

Exploratory Laparotomy. By the same. Reprinted from Journal American Medical Association.

Two Cases of Removal of Uterine Myoma. One Suprapubic Hysterectomy; the other Complete Hysterectomy. A New Method of Disposing of the Stump. Microscopical Examination of the Appendages. Remarks on the Treatment of Uterine Myoma by Electricity. By Mary A. Dixon Jones, M. D.; Surgeon to the Woman's Hospital of Brooklyn. Reprinted from New York Medical Journal.

A Hitherto Undescribed Disease of the Ovary; Endothelioma Changing to Angeioma and Hæmatoma. By the same. Reprinted from New York Medical Journal.

Misplacements of the Uterus. History of Cases Showing how in many Instances They are Produced; the Accompanying Conditions; Microscopical Examinations. By the same. Reprinted from Pittsburgh Medical Review.

Fourth Annual Report of the New York Cancer Hospital.

Some Observations on the Conformation of the Human Cranium. By Charles H. Merz, A. M., M. D., Lecturer on Pathology and Microscopy in the Medical Department of Wooster University, Cleveland, Ohio. Reprinted from Medical Age.

The following volumes of the Physician's Leisure Library Series, Published by George S. Davis, Detroit, Mich.

Diabetes Mellitus and Insipidus. By Andrew H. Smith, M. D.

The Modern Treatment of Diseases of the Kidney. By Professor Dujardin-Beaumetz.

An Introduction to Practical Bacteriology. A Guide

for Students and General Practitioners. By Thomas E. Satterthewaite, M. D.

Bright's Disease of the Kidney. By Alfred L. Loomis, M. D., LL. D.

The Male Urethra; Its Diseases and Reflexes. By Fessenden N. Otis, M. D.

Memorial Sketches of Dr. Moses Gunn. By his wife. With Extracts from his Letters and Eulogistic Tributes from his Colleagues and Friends, 1889. W. T. Keener, 96 Washington Street, Chicago.

Oxygen and other gases in Medicine and Surgery; An Essay on Medical Pneumatology. By J. N. Demarquay, Surgeon to the Municipal Hospital, Paris, and of the Council of State; Member of the Imperial Society of Surgery; Correspondent of the Academies of Belgium, Turin, Munic, etc.; Officer of the Legion of Honor; Chevalier of the Orders of Isabella the Catholic and of the Conception, of Portugal, etc.

Translated with Notes, Additions, and Omissions, by Samuel S. Wallian, A. M., M. D., Member American Medical Association; Ex-President of the Medical Association of Northern New York; Member of the New York County Medical Society, etc. F. A. Davis, Philadelphia. 1889.

Announcement of the Minneapolis Homœopathic Hospital, Mineapolis, Minn. 1888–90.

CORRESPONDENCE.

CAMPHO-PHENIQUE IN ABSCESSES CONSEQUENT UPON PELVIC CELLULITIS OF PUERPERAL ORIGIN.

Brownsville, Washington Co., Md.

Having received, not long since, a specimen of campho-phenique, I was desirous of testing its efficacy in the inflammatory conditions in connection with which it has received much praise. An early opportunity presented itself, and the results were so favorable that I desire to bring the remedy to the attention of your readers, simply relating the history of the case.

In a case of pelvic cellulitis of puerperal origin and due to bad sanitation, one of the most distressing features was the appearance of numerous deep-seated abscesses, the first of which made its appearance at the juncture of the last dorsal and first lumbar vertebra. This abscess had been cut and was discharging a thin ichorous pus when I received the sample of campho-phenique above referred to.

Being incredulous and consequently cautious, I at first applied it in a dilute form (about half strength); but emboldened by results I then applied it pure. The mode of application was very simple—I poured the remedy directly into the discharging cavity and covered the wound with absorbent cotton. This latter was left in place 48 hours, and when it was removed I found a sore free from suppuration and full of healthy granulations which had sprung up as though by magic.

Other abscesses of a similar nature made their appearance upon the nates and hips, and each, as it appeared, was treated as was the first one, and with the same gratifying results.

The result satisfies me that campho-phenique is the best dressing for ill-conditioned ulcers that I have ever seen.

The combination seems to be therapeutically perfect, both theoretically and practically, and while the whole acts as a powerful antiseptic, the anæsthetic properties of the phenic acid renders its application well-nigh painless, which is a most important matter both for the patient and the surgeon or physician.

J. T. Yourtee, M.D.

SOCIETY PROCEEDINGS.

SOUTHERN SURGICAL AND GYNÆCOLOGICAL SOCIETY.

Dr. W. L. Robinson, Danville, Va., read a paper on Gynecology in its Relation to Obstetrics, in which he spoke of the cervix uteri in its pathological condition, predisposing to hæmorrhage prior to labor, laceration, and septic absorption. He could find no explanation in medical literature of the cause of ulceration of the cervix, non-specific and non-malignant, causing hæmorrhage in two cases which came under his observation within the last twelve months. He used the word "non-specific," because of the perfect health of the patients prior to the pregnancy and since delivery—his knowledge and intimate acquaintance for years with husband and wife. The first case was seven months advanced, and she was spending the summer in the mountains for the benefit of the health of one of her children. She found herself unwell after a week, and the flow was sufficient to soil the clothing and require napkins. A physician was called who gave ergot and opium, which controlled it in twenty-four hours. Two weeks subsequently the conditions repeated themselves, and relief was obtained by the same remedies. She returned to the city and was again annoyed by a like hæmorrhage, which came on about 7 p. m. daily in spite of the efforts of the attending physician to control it, which continued until the sixth day, the patient having reached home. Dr. Robinson was called and made an examination with speculum. He found the os granular, denuded of its mucous coat; upon gently opening it with uterine dilators he discovered a small clot adherent to the ulcer which caused bleeding when removed. He applied carbolic acid to the ulcer, and dusted the os and vagina with boric acid. He continued treatment until the parts were in a healthy condition, and delivered the woman at full term without hæmorrhage, tear, or any unusual sequelæ. No placenta prævia existed, and not one drop of blood escaped after the first application of carbolic acid until after delivery, and then everything was normal. The second case occurred a few weeks subsequent to the first, with history and result similar.

He has for several years made it a practice to examine his regular patients whenever a yellowish or dirty-white vaginal discharge exists, especially if the vulva is irritated, and almost invariably finds the os granulated, whether lacerated or not, and he persistently treats them until restored to a healthy condition, explaining fully to the patient the importance of such treatment.

Dr. Bedford Brown, Alexandria, Va., corroborated the statements of Dr. Robinson by the citation of a case. The patient had a bilateral laceration of the cervix. She became bitterly hostile to sexual intercourse with her husband, and had an intense dislike of his company and presence. This preyed upon her mind to such an extent that she became insane. He treated the case with applications of nitrate of silver, and the lacerations healed perfectly. After that all symptoms entirely disappeared. The patient regained her reason, affection for her husband, and had lost the hostility to sexual intercourse which she had. She has since borne three children. He has examined the condition of the cervix after each birth, and the repair is perfect.

Dr. George J. Engelmann, St. Louis, read a paper entitled

Menstruation and Pregnancy After Removal of Both Ovaries.

The following are the conclusions drawn from the history and microscopical examination of Dr. Engelmann's cases, which are corroborated by numerous cases of oophorectomy and double ovariotomy now observed, whose histories have been recorded for a sufficient length of time after the operation:

1. That the continuance of menstruation after removal of both ovaries is due to remains of ovarian stroma left *in situ.* 2. That portions of the ovarian tissue, however small, which remain after the removal of the greater portion of the organ, whether or not the Fallopian tube be preserved, may retain their activity and continue the functions of the entire organ. 3. Even elongated pedicles may contain ovarian stroma in which the functional activity of the organ may be continued. 4. That remnants of ovarian stroma do not necessarily preserve their vitality and functional activity.

The deductions of practical value to the operator are even of greater importance, and they are these: *a.* For the successful performance of oophorectomy it is requisite that every particle of ovarian stroma shall be removed, if the desired result is to be expected with certainty. *b.* If shrinkage of fibres, the limitation of hæmorrhage, or cessation of annoying symptoms is to be accomplished with the greatest certainty, both ovaries must be completely removed, and not even a particle of ovarian tissue left *in situ.* *c.* In the performance of double oophorectomy in women not yet beyond the climacteric, and not suffering from utero-ovarian reflexes, such healthy ovarian tissue as may exist should be spared in order that function activity may not be impaired.

DISCUSSION.

Dr. W. D. Haggard, Nashville, Tenn.—The speaker voiced my own sentiments when he said that most of the hæmorrhagic discharges that occur from the uterus after the removal of the appendages depend on some other cause than that of menstruation. In January last I removed the tubes and ovaries of a woman; it may be that I failed to get all of one of them. At first, for three or four months the patient had slight hæmorrhagic discharge which annoyed her not a little. I told her that these discharges were of frequent occurence under such conditions, and that she must not worry. I had a letter recently stating that she had three profuse discharges in three weeks. I am satisfied that these are no menstrual discharges, but are dependent on some other cause. I know that I have never seen so much congestion of the intestines, tubes and ovaries as I noticed at the time of the operation in this case. They were all of a reddish-brown color.

Dr. A. W. Johnstone, Danville, Ky.—After spending five or six years studying this subject, I feel justified in saying that I do not believe that the ovary has any more to do with menstruation than the clitoris has. I have left ovarian tissue behind, time and again and no menstruation has occurred. The whole thing is the most ridiculous fad that I have ever seen the medical profession take up. Take the analogy of the thing: Here is a little glandular body, the only instance where any such controls another body by reflex action. The reason that you fail to stop menstruation is because you fail to cut off the connection between the nerves. It is the neurotomy that you do that brings on the menopause, not the ovariotomy. Why is it that between the ages of fifteen and forty-five the ovary takes control of the uterus, and has nothing to do with it at other times? The truth is that the endometrium is the same kind of tissue as the hair follicle, and puberty brings out its function. It is made up of a single layer of epithelium and is washed away at each menstruation. The lining of the tube is quite different, being composed of ciliated epithelium which wave towards the uterus. Sometimes there is an arrest of the egg at some point, it grows and breaks through the epithelium: it is in this way that extra-uterine pregnancy occurs.

Dr. Virgil O. Hardon, Atlanta, Ga.—I can add to the experience of Dr. Engelmann two cases from my own practice, which confirm his position. I operated on a patient a year and a half ago for bleeding fibroid. In removing the second ovary, it appeared that I did not remove all of the ovarian tissue, but the precarious condition of the patient would not allow of more time being given to it. The patient recovered and has menstruated regularly since then. But there has been shrinkage of the fibroid tumor to a marked degree, and there has been no excessive hæmorrhage at menstruation. Another case was one on whom I operated for atrocious pain which occurred at each menstrual period, and refused to yield to any treatment. Both ovaries were in a state of cystic degeneration. The patient

was completely relieved of her menstrual pain, and I am sure that they were both entirely removed. That patient has not menstruated regularly since then, but has menstruated almost regularly, in twelve months ten times, missing two. This almost complete regularity would seem to rather disprove Dr. Engelman's theory, but the fact that she did not menstruate with entire regularity, would place her in the category with the irregular menstruants.

In regard to Dr. Johnstone's views, I would mention that the accumulated experience of laparotomists seems to show that the entire removal of the ovaries does, as a rule, cause cessation of menstruation; cases where it continues are always exceptional.

Dr. Richard Douglas, Nashville, Tenn.—It does not appear to me that the experience of operators indi cates that menstruation is stopped by ovariotomy. It is on that account that Tait's operation is done, and on that account that Battey's operation has fallen to the ground —because in the older one we only removed the ovaries.

Dr. A. V. L. Brokaw, St. Louis.—I rise to take exception to calling this Tait's operation. With characteristic English modesty, he improves on somebody else's operation, and it henceforward goes out as his operation. Tait deserves no credit for suggesting the removal of the tubes; Battey does that himself. Nor has he any more right to the flap splitting method.

Dr. W. H. Wathen, of Louisville, Ky.—It is impossible at present to come to any positive conclusion as to what controls menstruation. I think that we are more familiar with the laws that govern it now than we formerly were, but we require more observation and experience than we now have to convince medical men that any one cause controls it. If the theory advanced by Dr. Johnstone, that this is simply adenoid tissue, that the tissue is controlled by the nerve supply, and the ovaries have nothing to do with it, we can hardly account for the cessation of menstruation that has often occurred in cases where there was no intention of removing the tubes, indeed, where they were avoided. These are on record. It may be that the ovaro-uterine nerve has some of the spinal system connected with it. If you only remove the ovary in this case, I hardly see how this nerve could have been cut. This would seem to be demonstrated by the illustrations of Olshausen. Tait now cuts close to the uterus and in that way he is enabled to sever the nerve. If the nerve were not severed, and menstruation continues, it is hardly probable that it is the sole factor regulating that function.

Dr. Johnstone.—I rise to defend an absent friend. The statement has been made that Tait claimed an operation that did not belong to him. In a recent medical publication Tait makes a statement on this subject, in which he says that the operation was described twenty years ago. As to the difficulty between Battey and Tait, it speaks for itself; I am a friend of both and have nothing to say on the subject. But I deny that Tait deliberately steals other men's operations.

Dr. Engelmann.—I am gratified at the discussion that my paper has evoked. I cannot help but hold to the theory I gave, and I that the sense of the profession coincides with it. Where the ovaries have been removed these bleedings occur, but they will not continue up to the natural period of menopause. I have mentioned a great many hundred, and in all but 12% menstruation ceased after the removal of both ovaries. It is not stated there that scraps of tissue have been left. We often think that we have removed all of it when we have not. It is quite natural for the operator in his endeavor to keep clear of the ligature, when he is making his cut, to cut into the ovarian tissue. And if absorption does not take place, it may remain active. Schroeder has even suggested leaving some of the tissue to keep up the healthy functions of the woman. He was not successful in some cases, as the small portion does not necessarily remain active; it may be absorbed, or inflammatory deposit may surround and cut it off.

We have the same relation between the uterus and the ovary that we have between the uterus and the breast; if we remove the uterus we will not have the functional activity of the breast continuing. The nerve is merely a conductor, not an agent. The stimulus may come from the stump of the nerve, precisely as it does in the man whose arm has been amputated; he perceives a sensation that seems to come from the finger.

The theory of Dr. Johnstone must be removed before we can adopt it in opposition to the laws so well established for these long years. It is easy enough to prove that theory, by ligating the nerve in the dog. But even then it would not tell us that the influence of the ovary is not great; he could as well ligate the artery and destroy its function by cutting off its blood supply. As to Dr. Hardon's case, this bleeding may recur for a year or more, but it will then stop if both ovaries were removed. In the interim, I look upon it as a menopause. Again, after the removal of both ovaries for pyosalpinx we are more apt to have bleeding than after removal for tumors. We should not speak of these cases until they have continued for many years.

Dr. G. Frank Lydston, of Chicago, contributed a paper on

Tropho-Neurosis as a Factor in the Phenomena of Syphilis,

in which he called attention to the relation of disturbances of the trophic function of the sympathetic nervous system, which the author claimed were the essence of all of the phenomena of syphilis. He said "the relations of certain syphilitic phenomena to organic or functional disturbances of the nervous system, and particularly the sympathetic system, are manifested here and there along the whole line of morbid phenomena developed in the course of the disease. Syphilitic fever is undoubtedly dependent upon the action of a special poison upon the sympathetic nervous system. From what we know of the trophic functions of the sympa-

thetic, we are justified in inferring that the majority of fevers are dependent upon the action of a specific poison upon the sympathetic ganglia. The syphilitic poison may produce disturbances of the sympathetic with perversion of tissue metabolism and excessive production of heat. The constancy of the syphilitic fever is explicable upon the ground of idiosyncrasy. The syphilitic roseola has been demonstrated to be an exception to the rule that syphilitic lesions are due to a collection of proliferating cells. It is due to vaso motor disturbance with resulting dilatation of capillaries. This nervous disturbance is dependent upon the impression of the syphilitic poison upon the sympathetic ganglia. The accumulation of cells in the more pronounced lesions of syphilis is simply an exaggeration of the normal peocess of tissue building. As is well known such tissue building is presided over by the filaments of the sympathetic nerves.

The symmetry of the peripheral phenomena of syphilis is suggestive of some causal condition affecting the central nervous system. As an illustration of the manner in which a nerve lesion could produce disturbed nutrition the author mentioned herpes zoster. Some of the lesions of syphilis which are difficult of explanation upon mechanical grounds, i. e., upon the theory of localized cell accumulation, are readily explicable by central or local nervous disturbance. For example, the alopecia of syphilis is similar to that which occurs in other diseases as a consequence of local and general malnutrition incidental to disturbed nervous supply—as, for example, alopecia areata, the alopecia produced by fevers, and the alopecia produced by neuralgic affections of the head. That the nutrition of the hair is profoundly affected by nervous disturbances is shown by the result of fright in producing blanching of the hair. The syphilitic infection not only has a peculiar affinity for the sympathetic nervous system, but especially for the upper and cervical portion of the sympathetic. In cases under skillful treatment the proportion of the lesions of the head, face and mouth is larger than in other portions of the body. The parts supplied by the 5th cranial nerve appear to be particularly susceptible. The majority of cases of syphilis under proper treatment escape general cutaneous eruptions. Very few indeed, escape alepacia, sore throat and mucous patches. Serious distructive ulceration of the pharynx and nasal, palatal and maxillary bones is very frequently met with in cases in which the active period of the disease has been apparently very mild. The affinity of the syphilitic process for the iris is explicable from the importance of the filaments of the sympathetic supplied the part. Even in congenital syphilis we see evidence of tropho-neurotic disturbance. The affinity of the disease for the epiphyso-diaphyseal junction of the long bones is certainly suggestive.

In reviewing the opinions of our best syphilographers, one is impressed with the fact that syphilis is a disease which runs a natural course in spite of treatment. This is characteristic of certain special diseases in which the sympathetic system is profoundly impressed.

One of the principal arguments in favor of the theory that tropho-neurosis is the foundation of syphilitic processes, is the peculiar action of the disease when it attacks certain parts, syphilis seemingly possesses the power of dissecting out definite portions of osseous tissue (apparently by cutting off their nutritive supply) in a manner as cleanly as it can be done by the knife. Thus I have specimens in my possession of the intermaxillary bone, portions of the alveola process of the maxilla, the palatal and nasal processes of the superior maxilla, the molar and ossa nasi which become necrosed and were removed from cases of late syphilis. These fragments present as natural a conformation as in their healthy condition. The ordinary explanation of destruction by pressure of syphilitic exudate will not suffice in these cases. If they be observed carefully it will be found that the first symptoms experienced by the patient are those incidental to the presence of a foreign body, *i. e.*, dead bone in the tissues. If pressure was the cause of the necrosis the death of the bone would be preceded by more or less painful swelling and inflammation. There is no plausible explanation of of these cases excepting a perversion of the trophic function of the nerve filaments supplied to the part. He claimed that all of the pathological processes incidental to syphilis are due to disturbances of nutrition produced by the impression of the syphilitic poison upon the sympathetic nervous system and that it is immaterial to the cogency of this theory whether the poison of syphilis be a microbe, bacillus, degraded cell, or chemical poison. It is probable that this idea or something similar has occurred to others, but if any attempt has been made to show that tropho-neurosis is the basis of all syphilitic phenomena the author is not aware of it.

Dr. W. D. Haggard, Nashville, read a paper on

The Improved Cæsarian Section Versus Craniotomy.

To the obstetric surgeon, but more especially to the parturient woman and her unborn child, is this subject of commanding importance.

The greatest obstacle to delivery, in the overwhelming majority of cases, is from deformity of the pelvis. When the obstruction is unsurmountable its nature should be determined before any attempt at artificial delivery is made. It is often that the surgical endeavor will be most intelligently and effectually applied when based on a full and accurate knowledge of the nature and extent of the obstacle to delivery.

The claims which the forceps, version, craniotomy, gastroclytrotomy, the improved Cæsarian section, the utero-ovarian amputation or total extirpation of the uterus, have to priority with regard to saving the life of both mother and child, was then considered at some length. The reader was in full accord with the dictum of the Church of Rome, that "if it is not possible to extract the infant without killing it, it is not possible to extract it without mortal sin." No man has a right to destroy life. The concensus of modern professional opin-

ion is as expressed by the British Medical Association, which emphasized the imperative necessity of our using every endeavor to avoid the destruction of fœtal life. Yet the child has too often been sacrificed,and since the ennuciation by this society. To deliberately sacrifice the life of the child with the hope of saving that of the mother, should long since have been relegated to the realms of desperate expedients wholly unjustifiable. In Cæsarian section the office of the physician is to save the life of both mother and child. Who has the right to decide which of the two living beings should die?

Statistics were given which showed the great success that has been attained by the improved Cæsarian section.

POINTS OF INTEREST ON THE LOUISVILLE AND NASHVILLE RAIL ROAD.

DeFuniak Springs, Fla.

This beautiful place, eighty miles east of Pensacola, has an altitude of 270 feet above the Gulf of Mexico, and is about twenty miles north of the shores of that Gulf.

The lake or spring is one of the most remarkable bodies of water; it is a perfect circle, and from the lake the ground gradually rises to the edge of the basin, about 250 feet from the water. The waters are sixty feet deep at the center, and clear as crystal, pure and cold. It has no inlet or outlet. It is surrounded by forests of pitch pine, whose resinous odors act like a healing balm to weak lungs. The salt sea breezes, tempered by blowing through twenty miles of this pine forest, have a remarkably tonic effect. The climate is exceedingly mild; the LeConte pear, peach, apricot, fig, quince, grape and berries are raised equal in quality, it is said to those of Southern California.

Here is located the Florida Chautauqua, the grounds of which are beautifully laid out, almost surrounding the lake, and comprising all the necessary buildings. The programme of the Florida Chautauqua covers over a month, and embraces lectures, concerts, readings, stereopticon entertainments, illustrations in costume of Oriental life, etc., and compares not unfavorably with that of the mother Chautauqua of the North. The programme of the entertainment of the coming Chautauqua season will be sent to any one who will address C. C. Banfill, Secretary, at DeFuniak Springs, as space will not admit of giving it here.

Caseine.—An investigation that adds to our knowledge of the nature of a substance of physiological as well as of chemical importance, such as the albuminoid body caseine, cannot fail to be full of interest. Hlasiwetz and Habermann some time back obtained leucine, tyrosine, glutamic acid, aspartic acid, ammonia, and a viscid uncrystallizable liquid by treating caseine with stannous chloride and strong hydrochloric acid. Since then E. Drechsel has turned his attention to the uncrystallizable liquid so obtained. He has found that by treating this liquid with phosphotungstic acid a precipitate is produced. This was washed with dilute sulphuric acid, heated with baryta water, and filtered. The clear filtrate, after removing excess of barium, was then evaporated with hydrochloric acid. In this manner he got the hydrochloride of a strong base, having the formula $C_7H_{14}N_2O_2Cl_2$. This yielded when treated with chloride of platinum long reddish-yellow prisms of the platinochloride $C_7H_{14}N_2O_2PtCl_6+4H_2O$. Platinic chloride gave also with the mother-liquor from the hydrochloride above a platino-chloride which, as may be seen from its formula, $C_8H_{16}N_2O_2PtCl_6$, is homologous with the first.—*Lancet.*

OBITUARY.

DR. THOMAS B. HARVEY.

In the death of Dr. Thos. B. Harvey, of Indianapolis, the profession of the West, and especially of Indiana, must mourn the loss of one of its best beloved and most highly honored members.

While delivering a clinical lecture on hæmatocele, at the Indiana Medical College, on the 5th instant. Dr. Harvey was noticed suddenly to manifest some difficulty in articulating and shortly afterwards he was seen to be wavering in the chair in which he was sitting. Students—amongst the number, his son, Jesse—immediately went to his assistance, carried him to the clinical table, from which he was soon removed to his home.

He died on the same evening, evidently from cerebral hæmorrhage, never regaining consciousness.

Dr. Harvey was born November 29, 1827, in Clinton Co., Ohio. After attaining a classical education, he began the study of medicine in 1846, and graduated from the Medical College of Ohio, at Cincinnati, after which he practiced in Plainfield, Ohio, until 1862, when an extended recognition of his skill and talents secured for him the appointment of examining surgeon for the Sixth Congressional district, with headquarters at Indianapolis. In this city he has lived since 1863, devoting his time and life enthusiastically to his profession, and compelling the highest regard and sincerest affection from all with whom he came in contact.

Upon the organizing of the Indiana Medical College, in 1869, Dr. Harvey was appointed to the chair of Gynæcology, and two years ago, was made permanent dean of the college.

He has been an active member of several medical associations, at whose meetings his presence was ever most welcome. He aided in the organization, and was elected president of the Hendricks County Medical Society; the Indianapolis Academy of Medicine; was vice president, and later on, president of the State Medical Society of Indiana; and it is probable that there are few attendants on the meetings of the American Medical Association and Mississippi Valley Association, who do not cherish a most admiring impression of his clear and forcible style of address, and of his cordial and friendly demeanor to all.

ORIGINAL ARTICLES.

TREATMENT OF TUBAL PREGNANCY, WITH REPORT OF A CASE.

BY F. D. MOONEY, M. D.,

Clinical Assistant to the Chair of Gynæcology, Missouri Medical College; Consulting Physician St. Louis Female Hospital.

Mary S., servant, æt. 21 years, divorced, mother of one child, æt. 2 years. First seen midnight, October 3. Had complained of cramps in the afternoon, but not of sufficient severity to cause her to seek medical advice. When first seen, she was pale, pulseless and restless. Found her menstruating, the flow having come on at the usual time, and had continued five or six days longer than usual. Strenuously denied the possibility of being pregnant. Diagnosis of abdominal collapse made, the usual symptoms being present. Death occurred in a short time.

The post-mortem showed the abdominal cavity filled with blood, a gallon or more; the left Fallopian tube ruptured about its middle portion. It contained a small sac, but the fœtus had escaped and was not found in the clots. The cut shows the exact size and relationship of the parts. It also shows with what ease an operation could have been done had an opportunity been afforded.

The history of tubal pregnancy shows that as such it terminates before the end of the fourteenth week.

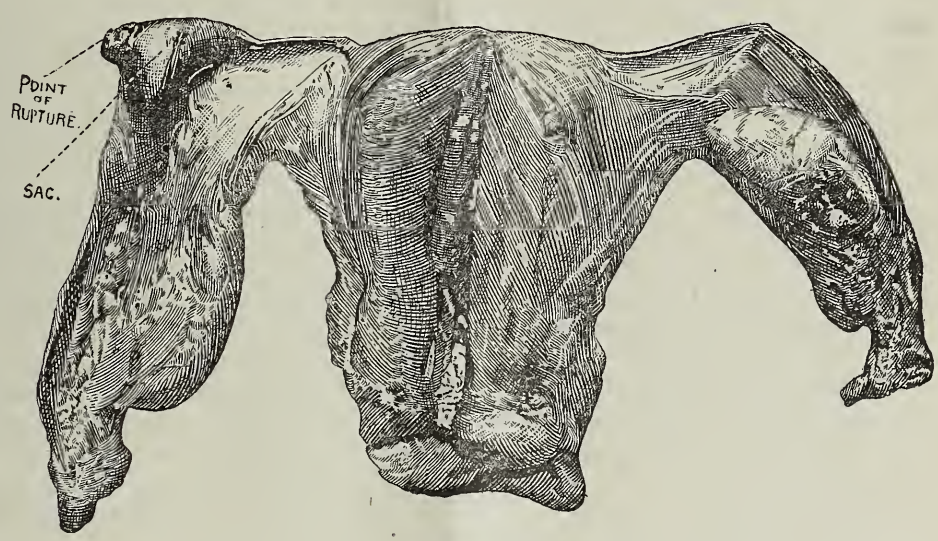
Before this time, unless interfered with, it terminates in rupture, either into the peritoneal cavity or extra-peritoneally, into the broad ligament. Such being the case, the treatment is naturally divided into cases which have been diagnosticated before rupture, and those in which rupture has already occurred.

The greater proportion of all cases reported have belonged to the latter class and, owing to the difficulties in making a diagnosis, such will, no doubt, continue to be the case, although the profession is becoming better acquainted with the condition, and the means of detecting it. Most cases, like the one which I recently reported to the society, do not come under the observation of the physician until rupture has already taken place.

Then, also, in many cases, the symptoms so closely resemble those of ordinary pregnancy as to be misleading to patient and physician, or, like in my case, there are no symptoms which cause even a suspicion of pregnancy.

If, however, a patient should consult a physician, with symptoms sufficiently well marked to cause him to make an examination, it is quite possible for him to arrive at a definite or at least a probable diagnosis.

The reported cases, however, show that the most competent diagnosticians are the least positive of their ability to recognize the condition. Tait says that a diagnosis cannot be made more than once in fifty cases. Strahan says it can not often be done with any degree of certainty before the fœtal heart can be heard, and rupture must take place before that time. But the medical literature of recent date shows some cases diagnosticated before rupture, and the diagnosis verified by operation or post mortem. Tait's statements that "absolute accuracy of diagnosis in diseases of the abdomen is far from being possible" is more true of extra-uterine pregnancy than of any other condition.



When a diagnosis can and has been made before rupture, several plans of treatment have been suggested and used at various times with different degrees of success. Almost all of them have had for their object the destruction of the life of the fœtus and the leaving of it *in situ*, hoping that it may be absorbed, or remaining, that it will cause no harm, or, if suppuration should

take place, maybe the fœtus will suppurate out, and the patient still live over it.

First of all, puncture of the sac and allowing a portion of the liquor amnii to escape, has been extensively used. It was first done with a trocar and canula, but afterward with an aspirator needle, which was considered safer. As late as 1888 Robert Barnes, speaking of this procedure, "prefers it to all others," saying "In the early stages, before rupture of the sac, electricity to kill the fœtus might be applicable, but simple puncture of the sac were better." Other authorities, equally as high, either recommend or countenance this operation.

It is urged upon the ground of its simplicity—simply puncture of the sac. Experience has shown that it is not always easy of performance. The sac is freely movable, with no adequate means of fixing it so as to be always easy of puncture.

If a mistake be made in diagnosis and a trocar thrust into an inflammatory mass, the result is likely to be a disastrous one. We know, too, that the withdrawal of a portion of the liquor amnii does not always insure the death of the fœtus, as has been proven by the experiments of Hermann and Frankel, each having reported a case where it was used and the fœtus continued to grow. Deaths from peritonitis or some other form of sepsis have been reported by such eminent and careful operators as Martin, Braxton-Hicks, James Y. Simpson, Thomas and others.

Owing to the great vascularity of the parts, puncture of the sac and death from hæmorrhage has been far from infrequent. Braxton-Hicks and others have reported deaths from this cause. Considering the great vascularity of the parts, the only surprise is that more deaths have not occurred from this accident.

Puncture of any kind opens a channel for the introduction of septic material which, with the condition of the patient, must often prove fatal, or reduce her to a condition of chronic invalidism.

The results of puncture have been so disastrous that it seems strange that any should still advocate it. Theoretically, it is unscientific; practically, it is disastrous.

The injection of poisonous materials into the sac to destroy the life of the fœtus, as first done by Friederichs, has been practically discarded. The dangers are the same as those of puncture plus the dangers of the material used.

Elytrotomy, first used by Thomas, is correctly summarized by Herman, who says of it that it is "dangerous and unscientific." Only Thomas' superior skill saved his first patient from bleeding to death.

The use of electricity in some of its various forms is of more merit than any of the methods already mentioned. Since Bachetti reported his first successful case, in 1853, it has been held in high esteem. His method was one of electro-puncture, which has proven to be open to the same objections as the other varieties of puncture.

Electricity has been constantly claimed, by the believers in it as a fœticide, to be comparatively harmless, and that even if it should not prove effective then it would be time to resort to other and more radical measures. This argument has done more to popularize the treatment than the actual good results which have been reported. Its value must be measured by the results as reported by those who have used it.

I shall not consider its use in any of the varieties of puncture, believing them te be too dangerous to be further tried.

Allen first successfully used electricity without puncture in 1869 and again in 1871. Landis and Lovering report a successful case in 1877. Since that time many cases have been reported in the United States as successfully treated by this method. In fact, it can be said to be an American treatment, not having gained much favor elsewhere. It was a great advance and should have, with one stroke, blotted out all other treatments then in use.

The authorities differ as to the best current which can be used. Lusk prefers the Faradic current, as does also Thomas. It is claimed for this current that it is more certain of destroying the placental circulation and preventing rupture of the sac from its continued growth than the galvanic current.

The interrupted galvanic current will, no doubt, if used in sufficient intensity, destroy the life of the fœtus; but it must be of great intensity to stop the further growth of the placenta—an intensity which is not always safe. Many of the cases reported as having been successfully treated by electricity are certainly open to the criticism that they were not cases of tubal pregnancy at all. They are not conclusive. They belong in the same category as the case reported by Dr. Buckmaster, of Brooklyn, which Tait handles so ruthlessly.

At the last meeting of the American Gynæcological Society, Dr. Hanks reported two cases successfully treated by electricity—a moderate galvanic current. He collects statistics from English medical journals of 97 extra-uterine pregnancies in the past 3 years and makes the remarkable statement that in 95% of them the diagnosis should have been made before rupture. In this, he, without doubt, over-estimates the ability of the profession. He urged the use of electricity as being safer than operative interference. He urges it before the fourth month and when there are only premonitory symptoms of rupture. If rupture has taken place, perform laparotomy.

To show the drift of American opinion I will briefly run over the reported discussion. Reeve, while favorable to electricity, says it may cause rupture of the sac and the attendant should be prepared to perform laparotomy at the shortest notice.

Gordon thought it unjustifiable to run the risk of hæmorrhage by waiting when laparotomy could be used with comparative safety.

Wylie claimed that while electricity might kill the fœtus it did not insure the safety of the patient.

Engelmann preferred electrcity in the early weeks for the general practitioner.

Kinlock favored a radical operation.

Dudley, of New York, thought exploratory laparotomy so safe and easy of performance that it were better to perform it in all doubtful cases.

In all these opinions I find not one which places electricity in advance of laparotomy and removal. They recommend it but at the same time they tell us that there is danger and that we must be ready for laparotomy on short notice. May be electricity will cause rupture of the sac, or if it does not cause it, may be it will occur during the time it is being used and even if electricity does kill the fœtus may be the placenta will continue to grow and laparotomy still be necessary. Electricity is clearly on the defensive.

If an operation is best in the hands of themost skill ful it is the treatment which should be recommended and the profession educated up to it. I remember to have heard the argument some time ago that puncture of an ovarian cyst was the proper plan for a general practitioner to follow because perhaps he did not know as well how to operate as the skilled ovariotomist. In the past few years however, the success of ovariotomy has been such a success that no one would now place himself in the ridiculous light of making such an argument. It is a defective one.

The general practitioner is told that electricity is best for him to use, presumably because he is not competent to do the cutting operation, at the same time he is told to be ready to operate, which presumes that he is competent to operate. If the attendant does not feel competent to operate he can obtain assistance while he would be waiting for the effects of electricity. Such being the case, the merits of the two methods must be based upon the practical results so far as they have been reported. For electricity it has been pretty well proven that it will destroy the life of the fœtus and in most cases also stop the growth of the placenta, that then abortion commences and that months or even years afterwards traces of the trouble can be found, in the shape of thickenings, at the site of the original sac. It is the only part of the body where it is agreed that a foreign substance which can be removed with comparative ease and safety should be left.

That patients have died from or at least during the time electricity was being used from rupture of the sac has been demonstrated several times. What are the facts as regards removal? In an article in the *Obstetric Gazette*, March, 1888, Dr. Baldy regrets that a majority of American surgeons favor electricity. He admits that it will kill the fœtus but says there are other dangers. He refers to two cases where "the fœtus ulcerated its way out" also "four cases where there was rupture of a blood-vessel without rupture of the sac." "As far as he knew there had not been a death from the knife. A number had died after the operation but they had died in consequence of the rupture, not from the operation."

In the literature, so far as I have been able to examine it, I did not find a death reported from the knife since Dr. Baldy's paper was written. The removal of the sac before rupture has been done several times but it has been uniformily successful. I fail to see why it should be more dangerous or difficult than an ordinary laparotomy for the removal of the ovaries. At any rate there must be many cases operated on before the results can be so disastrous as to offset the six cases of death from the use of electricity which I have already mentioned. In conclusion I can not do better than quote Strahan: "The proper treatment of extra-uterine gestation in the pre-rupture stage, whenever diagnosed or suspected, with great probability, rather, is instant abdominal incision and removal of the whole trouble."

All authorities, so far as shown, are agreed upon the treatment after rupture—do a laparotomy as soon as possible. Yet Parry, as late as 1876, was forced to say "From the middle of the 11th century when Albucassis described the first known case of extra-uterine pregnancy men have doubtless watched the life ebb rapidly away from the pale victim of this accident as the torrent of blood is poured into the abdominal cavity, but have never raised a hand to help her. The fact seems incredible, for if one life is saved by active interference it can be pointed to as the first and only case on record. It is an accident if in any there is certain death." Of the prognosis he says: "A whole lifetime—a whole century—is not enough to enable one person to make two errors in regard to the prognosis."

Speaking of laparotomy he says: "The great impediment to the adoption of this treatment is the uncertainty of diagnosis."

Such was the status of the case until Tait popularized abdominal surgery by advocating exploratory laparotomy for purposes of diagnosis and to make treatment possible in cases where it had not been before that time.

His first operation for ruptured tubal pregnancy done in 1888 and although a failure it convinced him of its practicability. At the time of writing his work on ectopic gestation, 1888, he had operated on 43 cases with only two deaths. It is safe to say that he saved just 41 lives—a showing which has revolutionized the whole treatment of extra-uterine pregnancy.

It is now a frequent occurrence—almost weekly—to see reports of operations for tubal pregnancy with recovery. In recent medical journals I find 2 cases operated on by Penrose, one before rupture and one afterwards, both recovered.

Tuttle reports 3 cases, all recovered.

Lusk reported to the N. Y. State Medical Association September 25, 1889, two cases operated on after rupture. One recovered, the other died on the eighth day from Bright's disease. Lusk strongly urged operative interference in the first edition of his work on Midwifery.

The only possible objection to operating in a case of rupture is the difficulty with which a diagnosis can be made. While it will be impossible to make a positive diagnosis it will not be difficult to make out that hæmorrhage is taking place into the abdominal cavity. The symptoms are characteristic and no matter what the

source of the hæmorrhage, an exploratory incision should be promptly made. Prompt interference will save the patient; delay will keep up the sad record of the past.

REPORT ON PROGRESS.

BACTERIOLOGY AND MICROSCOPY.

BY WILLIAM N. BEGGS, M. D., ST. LOUIS.

Value of Creolin Hydronaphthol and Sodium Fluosilicate as Germicides.

Charles J. Foote, M. D., in the *American Journal of Medical Sciences*. The author experimented with the following solutions:

Bichloride 1 to 10,000.
Bichloride 1 to 2,000.
Carbolic acid 2%.
Creolin 1 to 1,000.
Hydronaphthol (saturated aqueous sol.) 1 to 1150.
Sodium fluosilicate (saturated aqueous sol.) 1 to 120.
Sodium fluosilicate 1 to 1,000.
Thymol (saturated aqueous sol.) 1 to 1,200.
Resorcin 2%.

The bacteria experimented upon were 1,staphylococus pyogenes aureus; 2, pneumococcus; 3, streptococcus erysipelatus; 4 bacillus typhosus (typhus abdominalis?—Rep.)

The only germicides invariably sterilizing were the two solutions of bichloride and the carbolic acid solution.

The order of the germicidal powers is:

1. Bichloride.
2. Carbolic acid 1%.
3. Thymol 1 to 240 (?)
4. Creolin 1%.
5. Hydronaphthol 1 to 2,300.
   Sodium fluosilicate 1 to 240.
6. Resorcin 1%.
   Creolin 1 to 2,000.

Sodium fluosilicate, resorcin 1% and creolin are useless as germicides. Creolin has almost equal germicidal powers with carbolic acid. It, however, forming an opaque emulsion with water, should not be used for irrigating during operations. It should also not be used for sterilizing instruments as they are hidden by the fluid and their handles rendered slippery as if dipped in oil. Its best uses are for washing the hands and for vaginal douches. For these purposes a 3% or 5% emulsion may be used.

A New Method of Preparing Crystallized Hæmoglobine.

Mr. Manget reports the following method in the Academie des Sciences, (Paris). The first part of the method consists essentially of washing the corpuscles according to Hoppe-Seyler's method. Then the blood mixed with an equal quantity of water, is placed in a burette and one-fifth as much absolutely pure benzine is added. The whole is then thoroughly shaken for five minutes. It is then placed for twenty-four hours in water maintained at a constant temperature between 5° and 8° C. The mixture divides in three layers. One, vermillion-red in color, is composed of an almost pure solution of hæmoglobine. The second, of a dull red color, consists of the same solution in which float the stromas of the globules, more shriveled than by treatment with ether. The third, of a yellowish-white color, consists of an emulsified benzine, containing the fatty constituents.

Finally, the lower two layers are drawn through the stop-cock. They are added drop by drop to one fifth their volume of absolute alcohol, while being constantly shaken. It is then filtered and crystallized as in the usual method or preparation with ether.

Disposal of Sewage.

A Mr. Wollheim, of London, claims to have discovered a powerful gaseous disinfectant which he names ammonal. It is derived from a combination of lime with certain of the organic bases of the ammonia group.

It almost instantaneously removes the putrid odor from sewage and is said to rapidly destroy all putrefactive or pathogenic micro-organisms.

Dr. E. Klein reports that in a sample of sewage examined by him, which contained 2,400,000 bacteria per cubic centimeter, all were destroyed by the disinfectant, and it was rendered bacteriologically pure. He suggests that its effects upon the specific pathogenic micro-organisms should be tested. Possibly we shall soon have a new therapeutic agent of great worth for the treatment of pneumonia, tuberculosis, typhoid fever, etc.—*Jour. Am. Med. Asso.*

Bacteriological Examination of Nineteen American Mineral Waters in the Bottled State.

Geo. Minges, M. D., has made a bacterioscopic examination of 144 bottles of various mineral waters (19 varieties in all) to determine their bacteriological contents, their relative bacteriological purity as compared with foreign bottled mineral waters and with the water supply of Dubuque, Ia. The tendency of the day is to judge of the purity of a water for drinking purposes by the scarcity of the bacteria contained therein. Those waters containing large numbers of bacteria should not be used for drinking, especially by those suffering any impairment of the digestive organs. Dr. Minges has taken 250 micro-organisms per cubic centimeter as the limit for rejecting a water for portable purposes, and judges a water not by the average number of bacteria

contained in several samples but by the relative number of bottles rejected for exceeding this maximum.

The following are his conclusions and a table of waters examined with their relative bacteriological purity.

Name of water.	No. bottles contaminated out of 12.	No. ccm. of CO2 to the gallon of water.	Average No. micro-organisms to 1 cm.
Arcadian.....	1	Artificial.....	52
Bethesda.....	1	Artificial.....	85
Congress.....	1	392.289.....	93
Salutaris.....	2	Original CO2 allowed to escape, and artificial Co2 substituted.	59
Geyser.....	2	454.02.....	85
Silurian.....	2	Artificial.....	100
Buffalo Lithia....	2	.....	100
Rockbridge Alum	2	.....	863
Hathorn.....	2	375.747.....	68,290
Empire.....	3	344.669.....	1,407
White Rock.....	4	Artificial.....	2,218
Excelsior.....	4	250.....	8,417
Manitou	5	Recharged with its own CO2.....	886
Colfax.....	10	.....	17,103
Henk.....	10	Artificial.....	25,000
Blue Lick.....	12	.....	1,922
Columbian.....	12	272.06.....	2,973
Bethesda.....	12	Non-aerated.....	3,505
Castalian.....	12	.....	40,189
Crab Orchard.....	12	.....	150,000

1. The bacteria in bottled mineral waters are probably not derived from the spring in the majority of cases, but are due to contamination from the bottles and corks, the cleansing methods now in vogue being insufficient to destroy them.

2. Carbonic acid in a bottled mineral water has a powerful inhibitory influence on the development of germs, whether the gas is natural to the water, or has been artificially generated and added to it. When the proportion of CO_2 is 350 cubic inches or more to the gallon, the retarding influence of the gas is very great. It is much less when the proportion is only 250 cubic inches to the gallon. But among every dozen bottles of even the most highly carbonated waters there is at least one which contains more than 250 micro-organisms to every cubic centimeter, and ten even out of twelve bottles may be thus contaminated. When the water is charged artificially some time may be given for contamination before such charging is accomplished.

3. Sulphuretted hydrogen gas, in the proportion contained in mineral waters, probably has some inhibitory influence on the development of germs, but not to the extent which might be a priori expected.

4. As regards freedom from bacterial contamination, most of our native carbonated mineral waters are superior at least to several of the most popular European waters of the same kind.

5. The non-ærated so-called table waters are probably very inferior to ordinary hydrant water.

6. The strongly saline non-carbonated mineral waters are so badly contaminated as to be wholly unfit for internal administration in the form in which they are at present put up, unless the germs are previously destroyed by heating (for two hours at 70° C.—Reinl).

7. In order to bottle at least a non-carbonated mineral water in such a way that it will remain bacteriologically pure for an indefinite period, the bottle should first be boiled or steamed, kept in an inverted position in a place free from dust until cool, then immediately filled and closed with boiled corks.—*Jour. Am. Med. Ass'n.*

Disinfectant Properties of Sulphurous Acid.

In a letter to the *Medical Age* it is stated that M. M. Dubief and Brahl under the direction of Dujardin-Beaumetz have reached the following conclusions as to the disinfectant properties of sulphurous acid, as the result of a series of experiments made by them.

Gaseous sulphurous acid certainly has the power of destroying germs of bacteria contained in the air. This microbicidic action is increased in the presence of the vapor of water. It may destroy germs in the dry state however if the action is sufficiently performed.—*Epitome.*

Nasal Bacteria.

Jonathan Wright, M. D., gives in the *Journal of the Am. Med. Ass'n.* the results of his bacterioscopic examination of the nasal mucus in ten normal cases. The examination was made to ascertain as nearly as possible the normal bacterial inhabitants of the nose.

Portions of the nasal mucus were removed upon a loop of sterilized platinum wire—and inoculated upon nutrient gelatine and agar-agar, two tubes of each being used. Also coverglass preparations were made. The gelatine was plated out and pure cultures therefrom transferred to agar, glycerine agar, bouillon, gelatine, milk and potatoes, as was also done with the cultures obtained from the original inoculations upon agar. Care was taksn to avoid accidental contamination. Pathological cases and those which had been given nasal douches were not examined.

The bacteriological contents of the nose were found to vary with the state of the atmosphere and streets. Windy, dry and dusty conditions increased the number and variety of ærial bacteria found, while they were very much reduced after calm, rains or snow.

The following bacteria were found:

In 6 cases—staphylococcus pyogenes.

In 3 cases—micrococcus flavus desideus.

In 1 case—bacillus lactis ærogenes.

In 1 case—penicillium glaucum.

In 1 case—micrococcus cereus flavus.

In 1 case—micrococcus tetragenus.

Once in each of 3 cases—different undescribed forms. —*Epitome.*

Micro-Organisms of Dental Caries.

Messrs. Galippe and Vignal have studied the microbes which penetrate into the little dentine canals and which alone play an effective part in the destruction of teeth. They cleaned the dental cavity, crushed the tooth, enveloped in sterilized paper, in a vice, and sowed the several particles in different media. In this way they obtained 6 varities of micro organisms:

1. Small, short and thick bacillus is found constantly coagulates milk with formation of lactic acid.

2. Bacillus twice as long as broad, slightly narrowed in the middle, also forms lactic acid in milk.

3. Bacillus, similar to the preceding one, without narrowing, forms long chains, does not coagulate milk, prevents caseine from coagulating with acids and transforms milk into a yellowish brown fluid.

4. Very short and slender bacillus, about as long as broad, resembling a coccus. Transforms caseine which soon exhales an unpleasant odor and takes a brown coloration, such as the media of culture. It dissolves fibrine.

5. Roundish bacillus 4·5 fl long, found 8 times only. It transforms milk without coagulating it, into a brown fluid, which after some time becomes black and exhales a a bad odor.

6. Coccus, comparatively voluminous, 6 fl in diameter found 5 times only in teeth of advanced cariousness with wide canaliculi. It coagulates milk and forms lactic acid.

In addition, the pulp furnished the following three varieties:

1. Bacterium termo, which is met with in all albuminous substances in a state of decomposition.

2. Acts in the same way on albuminous bodies, interverts sugar and forms lactic acid.

3. Staphylococcus pyogenes aureus in a pulp intensively infected.

The biological properties of the microbes enumerated explain the process of caries. The microbes form lactic acid and dissolve the mineral substances of the tooth. The microbes disappear in the organic substance and destroy the albuminous bodies. The work of destruction is promoted by the saprogenic microbes present in the mouth.—*Deut. Med. Zeit.*

Vitality of the Cholera Bacteria in Milk.

Dr. S. Kitasato, of Japan, reports in the *Centralblatt f. Bakteriologie u. Parasitenkunde*, the results of his experiments in Koch's laboratory on the vitality of the cholera spirillum in milk. He found that in all cases the bacteria died as soon as the milk became sour. In milk, kept at a temperature of 97°F., the bacteria died in 14 hours. At a temperature of 46° or 54°F. they died within three and one-half days. In milk previously sterilized they maintained their vitality much longer as the milk did not sour so quickly. In previously sterilized milk kept at a temperature of 97°F. they died within two weeks, whereas, if kept at a temperature of from 71° to 77°F. they lived for more than three weeks.

Boiling in a water-bath for five minutes was sufficient to destroy them.

Biological and Therapeutic Experiments on Cholera.

Dr. Lowenthal succeeded in restoring the virulence of cholera bacilli (spirilla Rep.) after they had lost it by sowing them upon a paste of which the important constituent was the juice of hog's pancreas. It is claimed that this explains the action of the bacteria in the human intestine. Having reached the duodenum they produce under the influence of the pancreatic juice the ptomaines, which, being absorbed, cause the characteristic symptoms of cholera.

He offers salol as a therapeutic measure. It is decomposed by the pancreatic juice in the duodenum. In the presence of fresh pancreatic juice it destroys the cholera bacteria, and may be used previously to sterilize the nutrient paste. One gramme was generally sufficient to sterilize ten grammes of paste.

Lowenthal recommends as a prophylactic 2 grammes of salol three times daily. As a therapeutic measure he recommends four grammes at the beginning of the disease; then one gramme hourly until twenty grammes daily are given.—*Pacific Record.*

Microbes in Snow.

The following are the results of bacterioscopic examination of snow:

1. Snow always contains bacteria, some forms of which may be cultivated in nutrient gelatine.

2. These are more numerous in the first snow that falls than after it has been falling for some time. This indicates that a portion of the bacteria is derived from the air.

3. Snow that has been lying upon the ground for some time contains fewer bacteria which liquify gelatine than when freshly fallen, and more of those which do not liquefy gelatine.

This shows that the non-liquefying forms are capable of more rapid multiplication at low temperature than those which liquefy gelatine.—*Microscopic Jour.*

Bacteria of Warts.

The method to be used in staining is Gram's method modified by Kuehne. The staining solution is gentian violet dissolved in a 1% aqueous solution of ammonium carbonate.

Sections are stained in this solution half an hour, and then carefully washed in distilled water. They are immersed in Lugol's solution three minutes, washed again

in water, contrast stained in an alcoholic solution of fluoresceine, washed in alcohol and mounted.

The stratum corneum and stratum granulosum take a blackish blue color; the stratum malpighi and cutis are stained yellow. Between and in the cells, as well as in the lymphatic spaces of the malpighian layer, are found slender bacilli 1.5 inch in length. Sometimes they are found in the stratum corneum, rarely in the cutis. They are stained a bright red, while all the other bacilli by this method are stained a deep blue.

Gelatine and agar agar cultures have in every case given positive results.

The constant presence of the bacillus in the papillary layer of the epidermis explains the production of warts. The bacilli gain access through a fissure in the epidermis, and by chemical or mechanical irritation cause a proliferation of the epidermis. Then, later, by a reaction from within or by an exhaustion of the nutrient constituents they disappear; which explains their scarcity in old warts.—*Lyon Medicale.*

New Way of Staining the Bacillus Tuberculosis.

The following two solutions are used:

No. 1.	Crystal violet, - - -	part, 1.
	Alcohol (95%), - -	parts, 30.
No. 2.	Ammonia carbonate, - -	part, 1.
	Distilled water, - -	parts, 100.

When it is to be used a quantity of solution No. 2 is poured into a dish, and enough of solution No. 1 is added to give a deep stain if a small portion is dropped upon filter paper. The whole is heated to boiling and kept at that temperature during the process of staining. Cover glass preparations are prepared in the usual way (dried, passed through the flame) and immersed in the fluid for not longer than one minute.

Decolorize in 10% solution of nitric acid for three to five seconds. Wash in 95% alcohol. Counter stain in a 1% solution of eosine in 60% alcohol. Dry and mount in xylol balsam. (Balsam thinned with benzole or turpentine would probably be as serviceable.—*Rep.*)

For sections the method of staining is the same. A 25% nitric acid solution should be used for decolorizing however.—*Centralbl. f. Bakteriologie und Parasitinkunde.*

Bacteriology of Green Sputum.

Dr. Frick, of Zurich, has found a peculiar chromogenic bacillus in the green sputum often seen in chronic bronchitis and tuberculosis. It resembles in size and shape the bacillus typhi abdominals. It is aerobic and motile. It is not pathogenetic. It imparts to the nutrient medium the greenish color characteristic of the sputum. The bacillus itself is colorless. The pigment is soluble in water and alkalies but not in alcohol, ether, or chloroform.—*Medical Analectic.*

ABSTRACTS.

BY F. NEUHOFF, M.D.

Treatment of Bronchitis.

Acute bronchitis is rarely serious with healthy adults; but when the powers are already enfeebled, and at the extremes of life it is a disease which frequently proves fatal. It has two distinct stages which require widely differing methods of treatment.

In the first stage the mucous membrane is swollen and irritable, and provokes a great deal of useless cough. The skin is dry and there is a "raw feeling" under the sternum. In this stage the object of treatment must be to promote secretion. To an adult it is well to give some Plummer's pills at bed time, with a grain of opium, and if the tongue be coated, a Seidlitz powder next morning. A good mixture to be given three times a day is: ℞ Vin. antimon, ♏.x with liquor ammon. acet. ℥i.

To soothe the mucous membrane, use steam inhalations, perhaps medicated with terebene, or turpentine, or tincture of iodine or Friar's balsam. As a counter irritant croton oil liniment, applied cautiously to the front of the chest, is useful. Sometimes the first stage is so much prolonged that venesection will be required to relieve it. When there is spasmodic asthma occasioned by the congested mucous membrane, which often happens in neurotic patients, it must be met by an emetic of ¼ grain of tartar emetic with 15 grains of ipecac. Moreover, it is of prime importance to feed our patient well so as to obviate the danger from exhaustion which is always imminent in some period of bronchitis and which is not unfrequently the cause of death. Milk thoroughly boiled (half an hour) is the food for the young and old. To this may be added Mellin's Food.

Beef tea may be made nutritious by adding to it some broken biscuit or a little of the stringy muscular fiber of the beef which has been pounded in a mortar.

The second stage of bronchitis begins when moisture of the bronchial lining membrane and the skin succeeds the previous dryness. In this stage the object of our treatment must be to have the secretions coughed up. Respiratory stimulants, such as carbonate of ammonia and strychnia are in order. If there is a strain on the right ventricle, and especially if there exists an old standing mitral lesion, digitalis is indicated. The following is an efficient combination, when the bodily powers are being subjected to the strain of a severe bronchitis.

℞	Ammon. Carbon., - - -	gr. iv.
	Tinct. nuc. vom., - - - -	♏x.
	Tinct. digitalis, - - -	♏x.
	Sp. chloroform, - - - -	♏xx.
	Infus. cinch. flav., - - - -	℥i.

This amount is to be given every four hours. Alcohol must now also be administered, but never alone,

always with food. When the breath becomes short, on account of the accumulation of phlegm in the air tubes of the lung, an emetic of ipecac is indicated, except in old persons with rotten tissues. With these it would be unsafe.

No matter how worn out from lack of sleep the patient may be, narcotics must be scrupulously withheld, as voluntary effort only can maintain the breathing. When at length the secretion somewhat diminishes, snatches of sleep will occur spontaneously. These are followed by fits of coughing. Immediately after these food should be given and then sleep will again occur.

Daily physical examination of the chest entails unnecessary exposure to catching cold and must be shunned. Although the bowels are not moved for several days, no purgative should be given. Exposure connected with getting up to the night stool often has most serious consequences.—J. Milner Fothergill in *N w England Medical Monthly.*

Irrigation of the Stomach.

Lavage or irrigation of the stomach should be given a trial in every case of chronic dyspepsia which does not yield readily to the ordinary methods of treatment. It gives the best results in simple dyspepsia and early dilatation of the stomach. In gastrectasis of long standing, palliation only can be expected.

Owing to the loss of peristaltic power present often in simple dyspepsia, and always in dilatation, the stomach can not rid itself properly of the ingested material.

This stagnating and fermenting matter, sometimes remaining in the stomach for days, irritates and inflames the organ. The timely use of the tube will thoroughly cleanse the stomach, allow it a period of repose, and enable it to retain its muscular contractility.

In simple catarrh, the tube relieves the stomach of the super-abundant mucus. Such symptoms as flatulence, pyrosis, constipation and cardiac palpitation are speedily and permanently dispelled.

The irrigation is best done before breakfast. It should be repeated, at first daily, and then at gradually extended intervals. Tepid water is used, and the irrigation at each sitting continued till the water returns from the stomach clear.

To the last washing fifteen grains of salicylate of soda may be added to guard against renewed fermentation. Of course directions as to the diet of the patient must not be neglected and symptomatic medication may be employed if deemed necessary. A free evacuation of the bowels frequently follows the washing out of the stomach and thus the constipation so often present is relieved without special medication.—J. K. Crook, M.D., in New York *Medical Journal.*

The Application of Forceps to Transverse and Oblique Positions of the Head; Description of a New Forceps.

In England, Austria and Germany, most operators apply the blades of the forceps symmetrically—one blade to the right and the other to the left of the mother's pelvis, totally disregarding the position of the fœtal head.

In France, the same method is pursued when the fœtal head is at the superior straight; but when the head is in the cavity of the pelvis, classic French authors advise the application of the forceps to the side of child's head, even though it be necessary to place one blade anteriorly and the other posteriorly. In America the adherents to either plan of procedure are about equally numerous. The advantages of the French method are generally admitted. Reasons exist, however, to prevent the universal adoption of this custom. It is often impossible to grasp the head in such manner with instruments now in use. The difficulty arises with high situations of the part when occupying an oblique positition, and with transverse positions whether at the brim or in the cavity.

In transverse positions the most that can be attempted is to locate the instrument in one or other oblique diameter of the pelvis, seizing the head with a blade in front of one ear and the opposite blade behind the other ear. The higher the head, the greater the difficulty. When the head is in the transverse diameter of the brim, few attempt to pass the blades in any manner except to the sides of the maternal pelvis. Such a grasp, however, is insecure and exerts injurious compression upon the fœtal head. If the forceps be patterned after the Simpson model, rotation of the occiput may take place within the blades. If the instrument possess greater compressive power, rotation is hindered and the head is dragged into the pelvis transversely. If now the forceps be not removed, and rotation effected by nature or artificially with the hand or the instrument reapplied to the sides of the head, one of the following results may be anticipated:

1. Forcible extractive efforts may deliver the head, but it will be born with its occipito-frontal diameter in the transverse diameter of the pelvic outlet, causing as a rule laceration of the mother's parts and injurious if not fatal compression of the fœtal head.

2. It becomes obligatory to attempt to push up the presenting part and if the position can not be rectified, to deliver by turning, or,

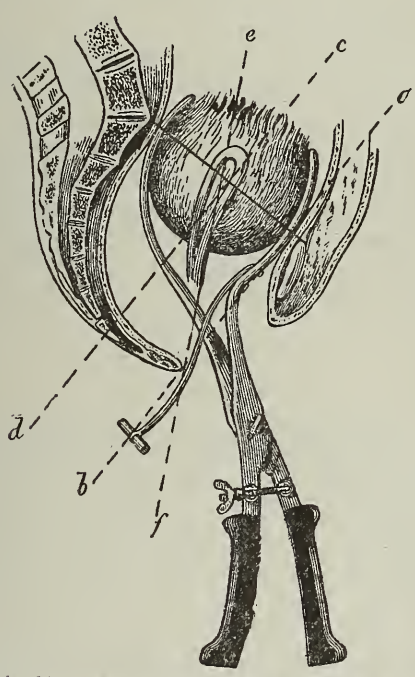
3. Failing to elevate the head, craniotomy is the only alternative.

The objections to the use of the classical forceps when the head is in an oblique or transverse position are as follows:

The pelvic curve of the forceps only conforms to the pelvic axis, when the instrument is applied with its concave edge directed forward, and with one blade located in each side of the mother's pelvis. Applied in this manner the forceps can not grasp the head in the biparietal diameter when situated either transversely or obliquely. The consequences of grasping the head in any other manner have been considered. In proportion as the instrument is turned to one side or the other for

the purpose of grasping the sides of the head, the pelvic curve of forceps departs from the pelvic axis, and the tip of the anterior blade is directed backward. Not only is the pelvic curve of the classic forceps of no value in these cases, but it complicates its introduction. It becomes necessary at one time to apply the male blade anteriorly, and at another the female.

To overcome these disadvantages I have designed a forceps curved on the flat. The introduction is simplified because the same blade is always the anterior and the opposite the posterior. The pelvic curve being upon the flat surface, the head can be seized in its biparietal diameter, whether high or low, or whether placed obliquely or transversely. The curve adopted is the result of experimentation upon fresh fœtal heads and artificial female pelves, and corresponds closely to the pelvic curve on the ege of the classic forceps. The



c d, Axis of inlet; a b, line of traction, parallel to axis of inlet; e f, line of traction with blades inserted at sides of pelvis.

instrument is furnished with a compressive screw for use with the axis-traction attachment, which consists of a steel rod having a handle at one extremity and a hook at the other. The hook fits closely into the fenestrum on the anterior blade and cannot injure the soft parts of the mother. The compressive power of the forceps is about equal to the Hodge, Wallace, and such instruments that are intended for application to the sides of the head.

By seizing the head in its biparietal diameter with the long axis of the blades, parallel to the occipito-mental diameter, we are better able to control flexion and rotation of the head and to deliver by imitating the normal movements of labor. There is also less danger of injuring the child.

At the time I designed my forceps I thought the idea original. Since then, I learned that Dr. Baumers published in the *Gaz. Med. de Paris*, 1849, a description of a forceps with anterio-posterior blades constructed on the same principle. It appears to have been a rather crude instrument with an exaggerated pelvic curve. No effort has been made to modify its construction.

Playfair, Leishman, and Simpson advise the practitioner to habituate himself to the use of one forceps. They say it is waste of space and money to encumber oneself with a number of instruments of various shapes and sizes.

But does not the dentist make use of a number of forceps curved in every conceivable manner? The surgeon likewise has a variety of knives, scissors and needles, possessing different shapes and forms. Is the obstetrician's responsibility less than that of the surgeon or dentist? Shall we then bind him alone to the use of only one particular forceps? No. He should be equally expert with several and employ one or another according to the circumstances of case, always selecting that instrument which best enables him to apply the blades to the sides of the head.—H. D. Fry, M.D., in *Journal of Am. Med. Association.*

A New Test for Albumen in Urine.—Trichloracetic acid is stated by M. Boymand in the *Repertoire de Pharmacie* for the present month to be the best reagent for the detection of albumen in urine. It is more reliable and possesses none of the disadvantages of the ordinary tests, such as nitric acid, and metophosphoric acid. It has also the power of precipitating that peculiar form of albumen which is thrown down by heat but redissolved on the addition of acetic acid. Trichloracetic acid is obtained by the action of chlorine gas upon acetic acid, three atoms of the hydrogen of the radical acetyl being replaced by chlorine. The compound is represented by the formula $CCl_3\,CO.OH$. It is a crystalline solid body, very soluble in water, and it forms salts analogous to the acetates. Acetic acid may be regenerated from it by the action of nascent hydrogen. The test may be used in a solid form or in solution. If the solid be employed a small fragment is placed in a test tube containing the urine; it sinks to the bottom and is dissolved, producing a cloudiness, or, with very clear liquids, a zone of cloud. The solution can be used either saturated or fairly concentrated. When poured upon the urine to be examined it forms a characteristic ring, like that obtained by means of nitric acid, but without producing any coloration. When the urine is rich in urate of soda it is better to dilute with distilled water, and thus avoid a cause of error which is common to all reagents. We have not been able to obtain a specimen of trichloracetic acid for the purpose of verifying the statements made respecting it as a precipitant of albumen in urine under all conditions, but we hope to do so in a short time, and to report the results of our experiments.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,

EDITOR.

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SATURDAY, DECEMBER 14, 1889.

THE MISUSE OF HYPNOTISM AND MASSAGE.

These two powerful agents have been known to the profession for a long time, but the possibilities for good which they present have only of late begun to be realized, and it is only of late that systematic experiments and close observations have been made with a view to ascertaining their true value and assigning them their proper scientific rank in our list of remedies. Both of them, at the present, have attained a tolerable firm and permanent foothold, though this can be more confidently affirmed of massage that it can of hypnotism. Coincident with the advance in our knowledge of the properties of these agents, and with the diffusion of a certain amount of this knowledge among the laity, comes the information that they have been diverted from their proper sphere of action in the hands of physicians, and have been lowered to the position of coadjutors to crime and incitants to lust.

Some very strange stories have come from France of what various people have done while under the influence of hypnotism, and there have been several trials in which the defendants were said to have been wholly irresponsible when the crime was committed, having been in a state of hypnotism at the time. Their offense consisted simply in their subservience to stronger wills, if the tales are true. So far as we know, no physician was criminally implicated in any of the above transactions; they were all carried out by laymen. Only minor degrees of hypnotism were manifested, but what things might not have been done had the hypnotizer only been more skillful or the subject more submissive? The possibilities in store are outlined by the marvelous and almost incredible results obtained in favorable patients by expert operators. Probably the only reason that such things have not happened here as well, is that the subject has not received such general attention as it had in France, and that there has been no such general diffusion of the knowledge of its powers and mode of application.

Massage, however, has been figuring for some time as an attraction in the establishments of an unquestionably bad character, which flourish in every large city under the title of "Massage and Bath Institutes," as advertised in the daily press. Inquiry shows that massage plays a very despicable part in the "treatment" administered, and this is supported by the exposures recently made by a newspaper of this city.

Something should be done with regard these matters; the practice of hypnotism should be by law limited to physicians as responsible parties, to guard against its use by the evil minded and designing; some regulation of this sort is necessary, or will be before long.

As to the abuse of massage, the laws in force probably cover the ground well enough but they should be more rigorously enforced.

The bold system of advertising should be suppressed; the "Institutes" should be closed, and the frail *masseuses* taken in charge as has been done before.

This matter, though not concerning physicians directly, should claim their attention, and as conservators of the public health and welfare, it comes more nearly into their province than into that of any other class of citizens.

THE TYPHOID SPINE.

Dr. V. P. Gibney, in the *N. Y. Med. Jour.*, publishes a communication with the above title, calling attention to a class of cases of obscure bone disease following typhoid fever, chiefly confined to the spinal column, about which but little is yet definitely known, especially as to pathology. The disease, however, seems to offer in general a favorable prognosis.

When pressed for an anatomical diagnosis he has used the term perispondylitis, meaning an acute inflammation of the periosteum and the fibrous structures which hold the spinal column together. There is acute pain on the slightest movement, whether lateral or forward, with absence of any marked febrile disturbance or neuralgia.

Periostitis of the long bones occurring after typhoid fever is not at all uncommon, as shown by Dr. Keen, in the Toner lectures delivered in 1876, in which he published 41 cases of bone disease after continued fever, of which number 37 followed typhoid fever. The time of appearance varied from two weeks to several months after the fever. Keen believed that the earlier cases came from clot, and the later from enfeebled nutrition, the periostitis arising either spontaneously or as the result of a slight traumatism.

Sir James Paget says that periostitis is most frequently seen in the tabia, always circumscribed, always occurring during convalescence, and unattended with delirium, fever, or any severe constitutional disturbance.

Though this class of disease in the long bones is often referred to in medical literature, such is not the case with spinal troubles following typhoid, of which but rare mention is made. Briefly, the symptoms of this latter affection are as follows, according to Dr. Gibney: Pain on the slightest movement, whether active or passive, is often exquisite.

There may be lameness and reflex spasm. There is but little if any deformity; tenderness on pressure may be present. As to the other symptoms which might be present, or which should not be present if the disease is one of the nature referred to, its supposed pathology, namely, a circumarticular lesion, confined to the periosteum and ligaments, will afford some basis for discrimination. As above stated, marked febrile disturbance and neuralgia are wanting; the pain is quieted by rest. Among the diseases to be differentiated are Pott's disease, sacro-iliac disease, neuritis, deep abscess, etc.

The most appropriate treatment is of course rest, if possible in bed, which may be combined with some mechanical apparatus if necessary, to further the same end. In one case the Paquelin cautery seemed to be of some benefit. General constitutional treatment as well as the necessary symptomatic treatment will suggest itself.The course of the disease is slow, lasting, several months, but recovery is usually complete.

The hopefulness of the prognosis, as compared with some of the other diseases from which it is to be differentiated, is an important item to which attention is directed.

Substitution in Proprietary Remedies.

In Kansas City recently seven druggists were each fined $500 and costs for counterfeiting a trade-mark preparation, the ingredients of which are well-known.

This suggests some thoughts on a subject, which appears to have received but little consideration from the profession in general. Is it proper for the physician knowingly to countenance the extemporaneous preparation by his druggist of such remedies, the formulas of which have been given to the profession and approved by them? In other words, is it proper to allow the substitution of an extemporaneous preparation for one with which we are familiar, upon whose effects we have learned to rely?

We believe that the question is very similar to the one of substitution in general, upon which there is little difference—even amongst doctors.

It is reasonable to suppose that the company manufacturing a remedy of this kind, dependent as it is for its sale, on the satisfaction which it affords to the profession, and the approval which they in turn bestow on it, would ever observe the strictest precautions in the procurement and selection of the drugs and other materials used in its make-up, and would guard most religiously the utmost precision and regularity in the various methods and steps of its preparation in order to attain unvarying uniformity and reliability of effects. And it is perfectly patent that the wishes of the profession in this regard are much more liable to be fulfilled under the above conditions than when the desired remedy is prepared under the vacillating conditions of all grades of drugs, degrees of skill, etc., to be found in drug stores.

It is a fact familiar to all of us that the most ordinary prescription which we may compose, when filled at different pharmacies, or even at the same pharmacy at different times, may appear so different as to call forth the complaints of our patient, who never believes the repeated bottle is quite as good as the first one; indeed, he frequently thinks it is a different preparation, and is firmly convinced that the druggist has made a mistake and given him the wrong medicine.

We all know how essential it is to have certain prescriptions prepared in a certain way, even aside from the manner in which the general rules of pharmacy would govern their preparation.

We believe, therefore, that the substitution or proffer by the druggist of a home-made preparation of this kind, for the one which is prescribed, should be deprecated by the profession as emphatically as is its cousin, the substitution of one drug for another.

The Surgical Treatment of Volvulus.

Dr. N. Senn contributes a very interesting article to the *Medical News* on the surgical treatment of volvulus, that form of intestinal impermeability which results from the rotation of one or more loops of the bowel upon its mesenteric axis. As compared with some other forms of intestinel obstruction it is quite rare. One thousand five hundred and forty one cases of obstruction from different causes were collected by Leichtenstern and anylized with special reference to the anatomical cause of the obstruction; 33 cases only were due to volvulus, including twists of both the sigmoid flexure and the ileum. The same author has also collected and examined 76 cases of volvulus, in which the lesion was in the sigmoid flexure in 55 cases; in the ileum in 23 cases, and in 8 cases in the jejunum and ileum combined.

Volvulus can only occur where the mesentery is of abnormal length, and is, therefore, most frequently met with in the segments of the intestinal tract normally provided with a long mesentery, as the sigmoid flexure and the lower part of the ileum. The length of the intestine is also an important factor in the causation of valvulus, as the extent of the mesenteric attachment to the posterior abdominal wall is about the same in all persons, and obviously, the longer the bowel the more the liability to twist. Thus among the Russian peasants who subsist, to a great extent, upon coarse vegetable food, the intestine measures from 20 to 27 feet in length and volvulus is much more common than in persons of German birth, in whom the length varies between 17

and 19 feet. Intestinal obstruction and peritonitis may secondarily bring about volvulus, by the sudden or gradual elongation of the intestinal canal which follows distention.

This fact has been verified several times in his own experience. Intestinal adhesions to the abdominal wall also favor volvulus.

The most important exciting cause of volvulus is unequal distribution of intestinal contents and exaggerated peristalsis, and these conditions may be brought about by any slight constriction or obstruction.

A violent peristalsis may sometimes of itself produce a volvulus, but where the intestine and its mesentery are of normal length, spontaneous reduction occurs as soon as the peristaltic wave has passed. Such a condition gives rise to abdominal pain and a temporary disturbance of the fæcal movement. When both the intestine and mesentery are abnormally long, however, spontaneous reposition seldom, if ever, takes place. In such cases the mechanical obstruction caused by the twist is soon followed by dynamic obstruction in the segment of bowel constituting the volvulus; the secondary conditions of paresis, venous engorgement, œdema and gangrene are followed by distention of the intestine and accumulation of its contents, thus aggravating the primary difficulties.

The most important symptoms and signs are: 1. Suddenness of attack. 2. Absolute obstruction. 3. Localized area of tympanites. 4. Permeability of intestine to rectal insufflation of hydrogen as far as the seat of obstruction. Primary volvulus is of sudden occurrence, and when located anywhere above the ileo-cæcal valve it is usually attended by severe pain and other symptoms of intestinal obstruction. Vomiting is a prominent symptom in volvulus of the small intestine, but is often entirely absent when the colon is the seat of the twist. In volvulus of the sigmoid flexure the pain is often referred to the umbilical region and not to the seat of the obstruction. A circumscribed area of tenderness over the twisted loop is an early and well marked symptom. Complete obstruction ensues in a fully developed valvulus, the violent peristalsis above the volvulus only rendering the occlusion more complete. Diffuse peritonitis occurs only after gangrene or perforation, but localized plastic peritonitis is of frequent occurrence.

The occurrence of gangrene is indicated by a small, rapid, feeble pulse and other symptoms of septic intoxication. One of the earliest and most important diagnostic symptoms is a circumscribed tympanitic percussion note over the volvulus, since Schweninger's experiments have shown that meteorism first occurs in the constricted or twisted loops of the bowel. This should be sought for before general tympanites sets in. The rectal insufflation of hydrogen gas enables us to accurately localize the volvulus, since it usually occurs in the colon or lower ileum. If in the ileum, the gas causes a gurgling sound in passing through the valve.

With regard to prognosis, the acuteness of symptoms and the immediate danger to life increase as the volvulus approaches the upper portion of the intestinal canal. Death may result from exhaustion or gangrenous peritonitis, and may occur in a few days; in a fully developed volvulus life is seldom prolonged for more than a week.

Treatment. No food should be taken into the stomach, and thirst should be quenched by chipped ice. If vomiting is severe, stomach washing is indicated, and is often followed by immediate and great relief. Peristalsis is quieted by opium by the mouth, or morphia hypodermatically. The bowel below the volvulus is evacuated by copious injections in Hegar's position; nourishment is given per rectum.

Taxis is not only useless but dangerous in volvulus, since textural changes occur so readily. The cautious insufflation of hydrogen may, where the twist is incomplete, and in very recent cases, effect a reduction. If this fails, laparotomy should be performed at once, as every hour of delay increases the danger, and lessens the chances of recovery. The fearful mortality of operations for the relief of volvulus is caused by their being performed too late. Early diagnosis and early laparotomy are the essentials. The incision should always be made in the median line, and if the bowels are much distended they should be evacuated by making a longitudinal incision an inch long into the gut opposite the mesenteric attachment, and then pouring out fæces by elevating one loop after another, beginning above. The intestine should then be washed out with a warm, weak solution of salicylic acid, and the incision closed by Czerny-Lembert sutures. If small spots of gangrene are present they should be covered by suturing healthy peritoneum together over them, but if the whole loop be gangrenous it should be exsected, the healthy ends closed, and lateral apposition made by decalcified bone plates. Where the loop is not gangrenous, but is so attached that it cannot be unfolded, the continuity of the intestinal lumen may still be assured by lateral apposition, and the seat of obstruction should be permanently excluded from the active fæcal circulation. Recurrence of volvulus can and should be guarded against by shortening the mesentery by folding it upon itself parallel to the long axis of the intestine and suturing the apex of the fold to the root of the mesentery.

MEDICAL ITEMS.

Medical Women in Russia.—Three hundred and forty-seven female physicians pursue the practice of medicine in Russia and its provinces.

The Number of Opium-Eaters.—About 400,000,000 people use opium, while 750,000 are confirmed opium-eaters; and of these, 95,000 live in the United States.

Creolin in Cystitis of the Female.—Dr. Parvin, *Med. News*, has employed creolin in the cystitis of wo-

men with the most satisfactory results. He recommends a ½% solution once a day, injected by means of a funnel and tube similar to that of Hegar, adapted to the bladder.

STRANGE, IF TRUE.—Spencer, Ind., owns a well whose waters magically promote hirsute growth, whether it be of the incipient mustache, or on the shining crown divested of its natural glory.

A HOMŒOPATHIC BALL.—The Homœopathic Charity Ball is said to have been a failure in every respect, the attendance being small and the receipts light. It was homœopathic in more than one respect.

COLOR OF SKIN GRAFTS.—Experiments at Leipsic show that skin grafted from a white to a colored person becomes gradually black, and that black skin grafted upon a white person in time becomes white.

DEATH FROM CHLOROFORM.—The London *Lancet* states that in the last thirteen years at least 120 deaths have occurred under chloroform, 59 of this number being before the operation, and thus clearly due to chloroform alone.

TO MIX VASELINE AND WATER.—Vaseline and water may be mixed by the addition of two drops of castor oil to each gramme of the liquid. By this means iodide of potassium may be introduced into an unguent without danger of decomposition.

LEPROSY IN MINNESOTA.—According to the *Weekly Abstract of Sanitary Reports*, there are at prosent seven cases of leprosy in Minnesota, none of which has the disease in a very severe form. Two of the lepers have children, all of whom are perfectly healthy.

ELECTRICAL SUNSTROKE.-As a remedy against "electrical sunstroke," as the affection is called that attacks men exposed to the intense rays of the electric arc by means of which metals are fused and welded, is a veil or mask of glazed taffeta, supported by a wicker head-piece, and provided with goggles of gray glass.

GONE OVER TO THE QUACKS.—It is stated in the daily papers that two physicians of Buffalo, formerly connected as teachers with the medical school of the Niagara University, have recently set medical ethics at defiance and gone into the business of advertising themselves as specialists. They have been dismissed from the Faculty.

A STRANGE EPIDEMIC.—An epidemic of "rhaphania," a convulsive disease supposed to be identical with chronic ergotism, is prevalent in the Wjatka "government" of the Roman Empire. Up to the present, 683 persons have been attacked, of whom 34 have died. The Kasan Medical Society has commissioned Dr. Kondoratski to investigate the outbreak.

A HEAD NURSE DIES BY AN ETHER EXPLOSION.—At the private hospital in New York City, conducted by Dr. W. Tod Helmuth, of the Homœopathic College, a valued nurse lost her life by an explosion of sulphuric ether. She was in the act of pouring ether from one bottle to another, and is supposed to have been too near a gaslight. Fatal burns were the result of the accident, followed by death, about 48 hours later, on the 21st inst.

A "VACCINE" FOR INFANTILE DIARRHŒA.—M. le Docteur Jose Triano, of Columbia, asserts that a drop of balsam of copaiba, placed on the umbilical cord of newborn infants after section, protects them from athrepsia and choleraic diarrhœa. It acts as a vaccine, and is a certain prophylaxis for the affections. Previous to Dr. Triano's discovery, the infant mortality resulting from them in Columbia, like in France, was considerable, but now they have almost disappeared.—*Med. Rec.*

ERGOT IN CHOLERA.—Surgeon-Major Comerford, of India, has recently been using the fluid extract of ergot with marked success in the first stages of cholera and in severe diarrhœa. The drug was used hypodermically in ten minim doses. In every instance its use was followed by complete success, the diarrhœa being quickly checked and collapse averted. These results were, however, only obtainable during the first stages of the disease.—*Med. and Surg. Rep.*

AN ECCENTRIC PHYSICIAN'S WILL.—A physician's last will and testament, of an extraordinary character, is about to be contested at Buda Pesth. It is that of the late Dr. Goldberger, who left a fortune of $250,000 to accumulate until, in the course of years, it shall have reached the sum of $1,000,000,000 when it shall begin to be used as a fund for the abolition of poverty everywhere. The trustees appointed under the will having declined to serve, and claimants for the estate have arisen at Madrid, London, and in this country.

ANTIFEBRIN IN TONSILLITIS.—Dr. Sahli has found, both from personal experience and from numerous observations on patients, that moderate doses of antifebrin will almost invariably give great ease in cases of acute tonsillitis, thus allaying the distress of the patient, and enabling him to swallow food, stimulants or medicine. The dose he employs is 7½ grains, which he usually orders in a mixture with spirit and sirup which must be shaken up before being taken. This is sufficiently agreeable to be taken readily even by children. Dr. Sahli mentions that he has found great benefit from this treatment in scarlatinal sore-throat.

A CASE OF GASOLINE POISONING.—J. G. Biller, M.D., reports a case of gasoline poisoning in *N Y. Med. Jour.*, in a child, æt. 19 months. He saw the case within three minutes after the accident, and found the child almost comatose, breathing slow and pulse impercepti-

ble; heart beat barely perceptible, and at times so feeble that it seemed to have stopped. The face was livid and cold, eyes rolled back, with pupils slightly dilated. The rest of the body was cold, extremities livid. The treatment consisted of washing out the stomach, with stimulation by digitalis, brandy and amyl nitrite, and resulted in recovery in a short time.

Malingerers' Fever.—At a recent meeting of the Manchester and Literary Philosophical Society, Dr. Alexander Hodgkinson called attention to the case of a girl who was not suffering from any febrile complaint, but in whom the thermometer registered abnormally high temperatures. Observation led to the discovery that she had somehow learned a well-known dodge and was in the habit of wrapping the thermometer in the edge of the blanket and then inserting it in her mouth. The general conclusion drawn during the discussion of Dr. Hodgkinson's paper appeared to be that the increase of temperature is the result of the work done by the capillary attraction of the moisture.—*Brit. Med. Jour.*

A Frank Confession.—Diphtheria of a malignant type is uncommonly prevalent, the number of deaths from it for the week ending October 26, numbering 24; the week following showing a considerable increase. The disease does not appear to be epidemic, but seems to be due to local causes, defective sewage in particular. Chicago's other scourge, typhoid fever is always present. The Health Commissioner has no return of the number of cases of this disease, but the death rate is high. The occurrence of typhoid fever in Chicago is not remarkable when one reflects on the water supply. The sewage of the city passes directly into the lake, and within a few hours, a portion, in the form of drinking-water, is pumped back again from the "crib" about two miles out. In the dim and distant future, we hope to have a "crib" four miles out in the lake, and expect to turn the sewage of the city into the Mississippi. —Chicago Cor. *Med. News.*

An Act to fix the status of Acting Assistant-Surgeons of the United States Army, or Contract Surgeons who Served in the War of the Rebellion.—Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled:

That all Acting Assistant-Surgeons of the United States Army, or Contract Surgeons who served in the War of the Rebellion, and whose services were honorably terminated, be commissioned as Acting Assistant Surgeons of the United States Army, the date of contract to be the date of commission and muster into the service, and the date when the service was honorably terminated, or the contract annulled, to be the date of discharge or muster out of the service:

Providing that any expense attending the issuance of a commission as Acting Assistant-Surgeon of the United States Army be borne by the applicant for such commission.

The following is extracted from a letter from Dr. Nagle on the subject: General Russell A. Alger, Commander in-Chief the G. A. R, is making an effort to have an individual history of every person who served in the late war, and obtain from him a complete history of all his part in the struggle, which he thinks should be obtained by the U. S. Census Bureau. The particulars are to be filed in the War Department, in order that a perfect history of the War of the Rebellion be made from them. The part the Acting Assistant Surgeon, U. S. A., took in the late war is quite important, and worth while obtaining, and if you take enough interest in joining an Association of Acting Assistant-Surgeons, with the objects as stated above, and also to obtain a copy of the list of those who served in this capacity, for publication, and furnish an individual history of each, as far as can be obtained, together with any matter that might have come under your observation that would be of interest in the completion of such a great work, or anything relating to the welfare of this corps, I would be very much pleased to hear from you. I would also be thankful for the names and addresses of any Acting Assistant-Surgeons, U. S. Army, who served in the late war, and who, you think, would take an interest in such a movement.

I am very respectfully yours,

John T. Nagle, M.D.

47 E. 21st Street, New York.

SOCIETY PROCEEDINGS.

SOUTHERN SURGICAL AND GYNÆCOLOGICAL SOCIETY.

Dr. John D. S. Davis, Birmingham, Ala, in introducing his paper on

An Experimental Study of Intestinal Anastomosis,

said that many of his ideas had been suggested to him by the paper of Dr. Brokaw which recently appeared in the Review. The reader reported thirty-two adhesion experiments on dogs and seventy-nine anastomotic operations by means of his approximation catgut mats and catgut plates for the purpose of illustrating the advantages of denuding the coaptation serous surfaces, and the integrity and absorbability of his catgut mats and plates.

He reported two applications of anastomosis to man. The first, ileo colostomy for obstruction in the region of the ileo cæcal valve, by means of catgut mats; the second, jejuno-jejunostomy for multiple gun shot injuries of the jejunum, with resection and lateral approximation by means of catgut plates.

His paper was replete with suggestive advantages of anastomosis over circular enterrorrhaphy, based on experimental facts. His anastomotic devices consist of

catgut mats and catgut plates—oval and horse-shoe. The mats are made of catgut in the following manner: A large continuous four-rib catgut frame is held in an oblong shape by four artery forceps, while the frame is being interwoven into an oval mat of the desired size, by means of a small catgut thread armed with a needle. The coaptation threads one fixed by passing a needle and thread between the two middle ribs and so returned as to loop two or three of the small gut sutures used in weaving the ribs together.

The plates are made of any size by means of an ordinary pocket-knife from a large one-eighth inch thick dry compressed plate of uncut gut tissue—made for the author by William Snowden, Philadelphia. The coaption threads are fixed by passing them through the plates by means of a needle or, better, by means of an awl, and knotted to fix them. The horse-shoe plates are made from the oval plates by cutting out one end of each of the oval plates. They are used for closing, in a hinge manner, extensive gunshot wounds of the convexity of the bowel.

The paper closed with the following propositions:

1. Approximation catgut mats may be made of any size in less than an hour.

2. Approximation catgut plates may be made of any size in from ten to fifteen minutes.

3. Approximation catgut horse shoe plates are very valuable in intestinal repair from gunshot injuries of the convexity of the bowel.

4. Approximation catgut mats and plates absorb away in forty-eight to sixty hours in gastro-enterostomy and in seventy to eighty hours in operations below the stomach.

5. Auastomosis by means of approximation catgut mats and plates furnishes the best conditions for the healing of the visceral wound.

6. Anastomosis can be performed by means of catgut mats or plates without division of bowel in five min utes; and with division or resection in fifteen minutes, including a continuous outside safety silk suture around the circumference of the mats and plates.

7. Denuding the peritoneum of endothelium at the seat of coaption hastens the exudation of plastic lymph, the formation of adhesions, and the definite healing of the intestinal wound.

8. When coaptation serous surfaces have been denuded of their endothelial covering by mechanical scraping, plastic adhesions readily take place, and definite healing by the formation of a network of new blood vessels in the product of tissue proliferation from the coaptation serous surfaces is initiated in eighteen hours.

Dr. A. V. L. Brokaw, of St. Louis, read a paper entitled

Intestinal Anastomotic Operations With Segmented Rubber Rings, With Some Practical Suggestions as to Their Use in Other Surgical Procedures.

The paper considered in detail the results obtained in an experimental study of all the anastomotic operations, and an original technique and application of segmented rubber rings, in such operations as, gastrostomy, doudeno-cholecystotomy, jenjuno-cholecystotomy, ileo-colostomy and circular-enterorrhaphy. Reference at length was made to the author's success in closing very large wounds of the intestines, by the use of a single segmented rubber ring, formed of eight short sections of tubing. The tube being introduced into the intestines, is bent evenly upon itself and the apposition threads being tied perfect, safe closure of the very largest wound is accomplished without stenosis following. The ring devised by the author is very simply constructed by passing a doubled strand of catgut continuously through from four to eight short sections of rubber drainage tubing of a diameter of from a sixteenth to a fourth of an inch. To the catgut within the rubber sections are tied the apposition threads. The segmented rubber rings are applied in the anastomotic operations in the same manner as Senn proposed in the use of his bone plates. The advantage of segmented rubber rings over other procedures and devices, is the rapidity with which they may be made, during an operation if need be. In the absence of proper tubing, pieces of catheter could be substituted. For the closure of small wounds in the intestines a new suture was proposed. Short rods of decalcified bone one sixteenth of an inch in thickness and one-fourth of an inch in width, are perforated at points less than half an inch apart for the passage of the apposition threads which are attached in this manner; a strand of chromatized catgut or well prepared juniper catgut is doubled and a single knot is made in the middle of this doubled catgut strand (silk may be used if prepared), the loop and end threads are passed through the small openings made in the decalcified bone rods. Thread and loop are threaded to separate needles, the rods introduced in the wound in the bowel, the needles passed from within outward less than a quarter of an inch from the wound margins and the loops and single threads in pairs. For this method was claimed accurate, rapid, and safe closure of small wounds of the intestines. The author preferred a segmented rubber ring in the closure of large wounds.

A description of two new wholly absorbable apposition rings was given, which had experimentally shown most excellent results. One was formed by decalcifying the long bones of chickens and young animals. The process of decalcifying being the same as for making bone drainage tubes. With short section of bone so prepared and a double strand of catgut the rings were made in a manner similar to the described segmented rubber rings. The second wholly absorbable ring was made of short sections of the arteries of large animals. After dissecting the arteries up from their sheaths, they are cut in short segments, boiled five minutes, and in the lumen of each section is pushed a glass rod and they are then immersed in alcohol for a few days. When the rods are withdrawn the hardened artery tubes are ready for use. With four to eight short sections of arteries so

prepared, approximation rings are easily made by passing a double catgut strand continuously through the lumen as described previously. These rings serve their purpose admirably, are very easily made, give a good-sized aperture and are entirely absorbed in a few days. Experiments were made upon over fifty dogs by the above methods.

Discussion.

Dr. W. O. Roberts, Louisville, Ky.—I have listened to both papers with great pleasure. Both seem to aim at the same end. I rather think that Dr. Brokaw's device suits the case better, in that it is the simpler affair, and every one who is prepared to do these operations at all is fully able to make one *extempore*. I think that Dr. Davis' suggestion for preparing the gut is better than that of Dr. Brokaw, of scraping it, in that the latter might give rise to hæmorrhage. I can remember quite a number of cases in which, had I known what I know now, I believe I could have gotten different results. I had one case of shot wound of the intestine in which there was considerable loss of tissue in the ileum; it became necessary to do a resection and, for a better device, I used simply a large block of cocoa butter. The patient did very well for twenty-four hours, when collapse came on and he died. The cocoa butter had become softened and absorbed and there was escape of fæces from the ununited portion of the incision. In many cases of gunshot wounds and stab wounds of the intestine, there is so much loss of tissue that in approximating the lips of the incision, the calibre of the gut is lessened so materially as to interfere with the passage of fæcal matter. The first case of intestinal wound that came under my observation was in 1884. It was the first laparotomy for intestinal wound that was recorded in this country. It was a stab wound received in a fight. It was done about dusk, and a physician closed the abdominal wound and sent the patient to the infirmary. I saw him about four hours afterward, and he then showed loss of blood. We decided upon immediate laparotomy. In reopening the wound, we discovered that there was hæmorrhage from the deeper parts of the abdominal wound; there was a considerable amount of blood in the cavity, and I found a large ragged wound in the small intestine and a puncture of the mesentery, from which blood was spouting. The wounds were closed by Lembert sutures, but in placing these, the calibre of the gut seems to have been lessened. Within forty eight hours he showed evidences of obstruction. He was given a dose of oil and they soon passed off. Had I known then what I know now, I should have practiced anastomosis. An advantage of Dr. Brokaw's method is that you can mash the ring together and get it in a smaller opening than you can the mat of Dr. Davis.

Dr. Virgil O. Hardon.—This subject is extremely hard to understand from written descriptions. The papers deal with the subject from a surgical point of view; but it is of equal importance to the gynæcologist, to any man who has to do much in abdominal surgery in any of its aspects. For every time we open the abdomen for tumors, etc., we are liable to do damage to the intestine that calls for just such procedures as described in these papers.

Dr. Hunter McGuire, of Richmond, Va.—I had the honor, in 1880, as chairman of the section on surgery in the American Medical Association, to be one of the first to advocate operative interference in these injuries. I also advocated drainage. Of course all who went through the late war saw many shot wounds of the belly; and we all said that we would infinitely rather be shot through the head than through the abdomen. To Dr. Senn, of Milwaukee, the whole profession is greatly indebted for outlining the treatment. The suggestions made to-day have only added to what he has said. Now no man has a right to treat as we used to treat.

Dr. Cunningham.—Dr. Davis advises a material that is soluble—catgut; Dr. Brokaw, one that is insoluble—rubber. It seems to me that the soluble one would be preferable.

I think that the abdomen should be opened in all cases of shot wounds of that region. A year ago I reported a case in which a man was shot and afterward presented no symptoms at all. The wound was in the left lateral aspect of the abdomen; a probe would not pass into the abdomen. The wound was treated antiseptically and the man expressed himself as feeling perfectly well. He died, however, in a few days, from peritonitis. The bullet had merely entered the cavity, clipped a little opening in the gut and passed out. Therefore I think that in all cases it should be opened.

Dr. Richard Douglas, of Nashville.—I don't suppose that there is a better established principle than that of exploratory laparotomy for shot wounds; this is unfortunately not the case with incised wounds. A few weeks ago I was called upon to see a patient with such a wound, which entered the cavity to the left of the umbilicus. The man walked home with the dressing in place. Three hours afterward I was called and found him in a state of collapse. I found that the wound entered the cavity, that the descending colon was cut half in two, and excessive hæmorrhage was coming from this wound. I closed the wound and did all I could; he reacted, but died of septic peritonitis fifteen hours later. Therefore I think we should accept the dictum of exploratory laparotomy just as fully in incised or punctured wounds as in shot wounds of the abdomen.

Dr. W. E. B. Davis, of Birmingham, Ala.—I don't think that anastomosis or anything else will do any good unless it is done immediately. Within the last three weeks I have been called in consultation to see three cases of gunshot wounds. In a case last week, there were no symptoms and no operation was done; he died later from septic peritonitis. I advised operation in this case, but my consultant demurred. Of course we must give Dr. Senn the credit for this; too much honor cannot be rendered him for his work on this subject.

Dr. J. L. D. Davis.—Our methods are not new; it is only the mechanical devices that are new. Senn has thoroughly illustrated the practicability of making such anastomoses as suggested by Dr. Brokaw of closing the convexity of the bowel by the segmented rings, or by my plates. Dr. Brokaw emphacized the fact that his rings could be inserted through any opening; so can mine, and mine can always be placed in an opening sufficiently large to carry on the function of the bowel. The incision into the bowel is always large enough; if you anticipate trouble, fold the mat and it will do. Dr. Roberts says that the rings are better because surgeons can prepare them more readily; there it no devise on earth that can be gotten ready more quickly than I can make this. You might just as well say that a man should not wear clothes because they cannot be made quickly. Bring them before the profession that the instrument makers may be interested and they will have them on hand.

As to the propriety of always opening the abdomen in shot wound, I would say that Senn has given us a method by which we can diagnosticate a perforation of the gut without opening it, provided the perforation in the abdominal wall is not valvular. I don't open the belly for this purpose when I have my hydrogen test accessible. Therefore, I think we must not necessarily open every abdomen that is shot.

Dr. A. V. L. Brokaw.—I believe that Dr. Davis' devise is one of the best for forming intestinal anastomosis. I do not think it has the wide adaptibility that the rubber ring has. If you do not happen to have it, you must do one of two things, spend a long time sewing up the bowel, or resort to the segmented rings. The rings will not be absorbed, but that makes no difference.

I don't agree with Dr. Davis when he states that the abdomen should not always be opened, and depends on the hydrogen test. I would open it every time where there was the slightest doubt.

I give Senn the credit of this entire procedure; he is a credit to America and American surgeons. But I am not pleased with the Senn test. Suppose there is a wound in the duodenum; you make the test, inflate the intestines, make the incision, find the opening and close it. You have the distended intestines, and the question is now, how are you going to get rid of the gas? Experimentally I have tried this, and I have failed to remove the gas. They become coiled up and actually rupture the sutures in some cases. Dr. Dalton, of St. Louis, met with this complication in one case. The armentarium of the surgeon is complete without this test. For my part I thank the gentlemen very much for their kind remarks regarding our papers. I hope they will try these experiments; they will get more experience in a few weeks of such practice than they would get in ten years of private practice.

Dr. I. S. Stone, Lincoln, Va.—Has Dr. Davis had any experience with the Senn test?

Dr. Davis.—Only on dogs.

Dr. W. E. B. Davis.—Has Dr. Davis ever failed with the gas test?

Dr. Davis.—I have failed, but it was the fault of the operator, not the test.

Dr. Cunningham.—If you had a gun-shot wound to deal with, and had made the test with a negative result, would you stop and do nothing more? Would you have no regard for the solid organs, the spleen, liver and kidneys?

Dr. Davis.—Yes; in case the solid organs were wounded, there would be symptoms of hæmorrhage which would indicate it. If the pressure is too great in inflating the intestines, of course you may lacerate them or do other damage; but you must be careful of this. I am a believer in the hydrogen test.

[to be continued.]

SELECTIONS.

THE INVASION OF THE "MASSEUR."

We must beg our readers to keep a close eye upon the *masseur*. He is bearing down upon unhinged humanity with a steady and relentless stride. He develops in the midst of us, he sails over from Germany and England to us, while, if there are any graduates of Heilgymnastik still left in Denmark, Sweden or Norway, we should like to know it ; for it has appeared to us, after some busy morning, that they have all called. Truly, the *masseur* is among us. He is a man of great resources. As his fraternity increases, he does not lose heart, or complain of competition, or seek protection from the State—be simply enlarges his field. In olden times the rubbing of a stiff knee with officinal linimentum saponis was the center and circumference of massage; soon, however, we learned how soothing was the emollient and theobromated hand upon the hyperæsthetic skin and diseased muscle. The *masseur* became firmly established as the resourceful prop of hysteria and unfailing staff of morbid locomotion. But then the sinewy and insidious hand began to gather adventitious aids, and seek new worlds to conquer. Having organized its movements into a company of Gallic polysyllables, so that its manœuvers of *topotiment* and *petrissage* and *effeeurage* should not be mistaken for plain, every-day slap-slap, jab jab, and thump-thump, it proceeded to attack all the several diseases and organs of the body. Adipose tissue in excess was made to disappear while glandular tissue, if mammary, was rubbed to make it grow. Massage has now applied itself to diseases of the eye, and granular lids are, *quoad* the granulations, artistically rubbed off; it has invaded the mouth and throat, reducing hypertrophied tonsils, opening the Eustachian tubes, and curing catarrh and deafness. The abdominal viscera were the early and easy subjects for this now illustrious science. The colon's lax vermicular waves are tempestuously hastened, and the

modest stream from the smaller bowel has scarcely babbled through the ileo-cæcal valve before it is rushed madly into the rectum. The pelvic organs have of late received the devoirs of ths new art; and the uterus has been rubbed and stroked and pommeled, all in pure French terminology, until this martyr-viscus could not help but free itself from adhesions and congestions, and pillow itself gently on its original vesical cushion. Lastly, we learned that the heart is to have massage. The heart has been, we are told by poets, torn and bruised, and bled and broken; but it remains for modern science to see that it shall have *effeeurage* and lomi-lomi. There are still a few things left for the *masseur*. Can he not apply *topotiment* to the brain, or, at least, to the cerebellum? Has he done justice to the kidneys? Might not the ovary receive a course of artistic jabbing before it is removed and bottled? When all fields are conquered, and every viscus springs responsive into blooming juvenescence beneath his learned touch, we recommend the *masseur* to Cristian science.—*Med Record.*

THE DIFFERENTIAL DIAGNOSIS OF VACCINATION SYPHILIS.

The *Deutsche med. Zeitung* of July 18th, 1889, reproduces a summary of Professor Fournier's clinical lectures on this subject by Dr.Portalier. The lines of distinction between syphilitic and other appearances are drawn with equal clearness and elegance by the French syphilologist. I.--Differential diagnosis between vaccinal ulcers and primary chancre: The latter never develops before the fifteenth day after vaccination, the time required being mostly three weeks; twenty days ofter inoculation it is still in its earliest development. A "vac cination ulcer is present, if ever, twelve or fifteen days after vaccination; after twenty days it is fully developed. The clinical differences are as follows; In the cases of vaccination ulcer (1) all the pustules are affected as a rule; (2) much inflammation and ulceration; (3) deeply-excavated ulcer; (4) much suppuration; (5) irregular margin as in soft chancre; (6) floor of ulcer uneven, suppurating; (7) inflammatory induration; (8) inflammatory, erysipelatous areola; (9) gland swelling none, or else inflammatory; (10) complications often present, sloughing, erysipelas, etc. Syphilitic ulcer: (1) Is restricted to one or a few pustules; often these do not develop; (2) the inflammation is slight; (3) the loss of substances is superficial; (4) is scanty or absent: crusts form, (5) border not notched, slightly elevated, gradually lost in the floor, (6) surface of floor smooth; (7) the "parchment" induration is specific, not merely inflammatory; (8) hardly any inflammatory areola; (9) gland swelling constant, indolent; (10) complications rare. II.—Differential diagnosis betwen vaccination rashes and secondary syphilitic eruptions: Under the former are comprised roseola vaccinalis, miliaria vaccina bullosa, and hæmorrhagica' also accidental rushes, rubeola, scarlatina, lichen, urticaria, etc. A true vaccinal rash (1) appears between the ninth and fifteenth day after vaccination; (2) absence of inoculation chance; (3) eruption has not syphilitic characters; (4) attended with fever; (5) is evanescent. A secondary sphilitic eruption (1) appears, at the earliest, nine or ten weeks after vaccination; (2) requires the pre-existence in every case of a specific ulcer at the site of vaccination, that is, to constitute the rash due to vaccination. (3) shows the characters of true specific eruptions; (4) is not attended with fever; (5) lasts a long time; (6) is accompanied as a rule with specific appearances on the mucous mambranes. III,—Differential diagnosis of vaccination-syphilis from hereditary syphilis, which may show itself about the time of vaccination; Vaccination syphilis (1) begins with a local affection, chancre, and indolent bubo; (2) has a typical development in four stages, namely, incubation chancre, second incubation, generalisation (secondary rushes, etc.); (3) never appears earlier, than the ninth or tenth week after vaccination. Hereditary syphilis (1) has no chancre, but begins with general phenomena; (2) has no typical development after vaccination; (4) is wholly independent of the latter as to time; (4) is attended by the habitus sypiliticus or syphilitic bodily aspect; (5) other manifestations of hereditary lues may be present;(6) the history may indicate syphilis. The only point in the above admirable summary requiring correction is the statement that a secondary syphilitic rash is not attended by fever.—*Br. Med. Jour.*

MEDICAL SUCCESS IN THE FACE OF DIFFICULTIES.

Sir Andrew Clark, from the summet of English professional success, has been reviewing the way which led him ; and his reflections, as contained in an address made by him on the occasion of the presentation to him of his portrait by the medical and surgical staff of the Londen Hospital a few weeks since, cannot fail of interest for all medical readers.

He was born in Scotland, and received his early education at Aberdeen. He went to London at the end of the year 1853 to study pathology, but with no intention whatever of engaging in the practice of medicine. He says he had never seen his parents, for they died in his infancy; he had never lived under the roof of a relative; he had only one acquantance; he had no introductions, and he was in such poor health that, according to a physician whom he consulted at the time, his expectation of life was only one year. On the other hand, he tells us that he had some advantages by way of counterbalance. These were a small patrimony, large love of work, and perfect self-dependence, which prevented him from ever asking favors of any man. "I had the habit of dealing with every day of my life as if it were my whole life," he says. "I was contented and happy over what the day brought me. I had no ambition of any kind, and I hated schemes and intrigues.

His first employment at the London Hospital was in the museum of that institution. After he had been there a while a vacancy occurred on the staff, and he became a candidate for the appointment, being warmly supported by his colleagues and the medical students. There were other candidates for the place and the contest was a severe one. "It was the greatest fight," says Sir Andrew Clark, "that had ever been fought at a London hospital, and I well remember when the fight was over how one of the opposing parties said: 'Poor Scotch beggar, let him have it; he cannot by any possibility have six months to live.' But the race is not to the swift, nor the battle to the strong; I am still living and working among you to-day, the sole representative of the staff of thirty-five years ago."

After frankly saying that he never expected to achieve the material success he has met with, Sir Andrew Clark said he presumed some of the students present would like to know from him what conditions he thought were essential to make a man a successful physician. These he gave as follows:

"Firstly, I believe that every man's success is within himself, and must come out of himself. No true, abiding, and just success can come to any man in any other way. Secondly, a man must be seriously in earnest. He must act with singleness of heart and purpose; he must do with all his might and with all his concentration of thought the one thing at the one time which he is called upon to do. And if some of my young friends should say here, 'I cannot do that—I cannot love work,' then I answer that there is a certain remedy, and it is work. Work in spite of yourself, and make the habit of work, and when the habit of work is formed it will be transfigured into the love of work; and at last you will not only abhor idleless but you will have no happiness out of the work which then you are constrained from love to do. Thirdly, the man must be charitable, not censorious—self effacing, not self-seeking; and he must try at once to think and to do the best for his rivals and antagonists that can be done. Fourthly, the man must believe that labor is life, that successful labor is life and gladness, and that successful labor, with high aims and just objects, will bring to him the fullest, truest, and happiest life that can be lived upon the earth.—*Boston Med. and Surg. Jour.*

Fatality Under Nitrous Oxide Gas.—Our Edinburgh correspondent last week drew attention to a death which took place in the operating room of a dentist after the administration of nitrous oxide. The occurrence is fortunately very rare but it seems advisable to ask whether this anæsthetic is as safe as it is usually considered to be. The patient, Lady Milne, was a woman aged 71, of stout build, and under treatment for fatty degeneration of the heart. She had been referred to the dentist by her medical man, in order to have two teeth removed and an opening made into the antrum. It appears that Lady Milne very much dreaded the operation, and was heard to remark she feared she would not survive it. At 9 A.M. she breakfasted, but it seems her food remained wholly undigested, for during the performance of artificial respiration, undertaking when breathing ceased, it was ejected unchanged. The operation took place at noon. The dentist noticed while he gave the gas that Lady Milne breathed very shallowly, and he begged her to inspire more forcibly, but this she failed to do, for, as was afterwards discovered, her corsets and clothing were so tightly bound round her that normal breathing was simply impossible. As soon as consciousness had gone the teeth were extracted and the antrum preforated. It was then observed by the dentist and his assistant that Lady Milne had become livid, had ceased to breathe, and her heart had stopped beating. Although artificial respiration was resorted to, the tongue being drawn forward, while the stays were with difficulty slit up with a knife, and nitrite of amyl exhibited, she never showed signs of life. Medical aid was promptly summoned, but in vain. That nitrous oxide will be blamed is certain, but a dispassionate consideration of the circumstances seems to point rather to the neglect of precaution on the part of the patient than to any particular danger from the anæsthetic. It is clear Lady Milne died from mechanical rather than from poisonous agency. Persons, even with fatty heart, although of course they are the least adapted for any kind of anæsthetic, take nitrous oxide with impunity; but the recumbent posture, with absolutely loose clothing and a stomach not distended with gases and undigested food, are conditions which can hardly be omitted without grave risk. The dentist who gave Lady Milne gas seems to have regarded her statement about her weak heart as merely the expression of a highly nervous woman, but we cannot but think it is wise in all such cases to give the patient the benefit of the doubt, and adopt the precautions to which we have above alluded.—*Brit. Med. Jour.*

Exploits of a French Anti-Vivisectionist.—At the sitting of the Academy of Medicine, when Dr. Laborde began to operate on the guinea-pigs, a lady in the audience suddenly arose and began a vehement speech against such useless cruelty to innocent animals. Some cheered her, others protested, and many laughed, but such a disturbance ensued that the proceedings had to be suspended and two ushers sent to politely request the lady to leave, which she did with flying colors. After the little incident, the academicians, now used to her interruptions, went on with business. The fact is, she is quite a Parisian character, Mme. Louise Huot by name, a rather good-looking brunette, wealthy, and always most tastefully attired, whom no one would take to be the mother of a big whiskered young man, a head taller than herself. She is the president of some sort of an anti-vivisection society, the offshoot of the well-known British association, and never loses an occasion to publicly protest against the doctors' cruelty. On the

occasion of the unveiling of Claude Bernard's statute she loudly hissed. At a College de France lecture she broke her umbrella over the head of the cruel lecturer, who was going to experiment on a live monkey. At a pro Pasteur meeting she raised such a disturbance that gallant old De Lesseps, whom she had bitterly denounced for presiding, had to protect her out—Panama had not failed then—and escort her to her carriage. More recently, at the Alfort School, during a meeting of veterinarians, she almost rammed her legendary parasol down the throat of a professor who was proceeding to investigate an innocent hen. Her exploits are legion. But on the present occasion it must be conceded she was not wrong altogether. Dr. Laborde's experiment on guinea-pigs was of questionable usefulness, and quite out of place at a public sitting. However it may be, Mme. Huot is generally respected, and rather liked by Parisians, who could not spare her for the world. At the Therapeutic Congress she was present at most of the meetings, but found nothing to reprehend, much to the disappointment of foreign members, who, on seeing her, expected some amusing incident.—*Paris Cor. Ther. Gazette.*

The Micro-Organisms Associated With Tuberculosis in Infants.—As the result of an extended series of observations founded on the autopsy of 39 infants, Babes made an important communication on the micro-organisms associated with tuberculosis in infants. In the majority of cases the micro-organisms of suppuration were present with the tubercle bacillus of Koch. In ul cerative diseases of the mucous membranes with tuberculous foci sapra genic bacilli were present; while in tuberculous pneumonia, pleurisy, peritonitis, and tubercular meningitis, one finds micro-organisms which have the power of producing these maladies. The author concludes that tubercular lesions open the door to the entrance of the micro organisms which aggravate the tuberculous process and state of the general malady and are often the cause of septic and pyæmic phenomena together with apparent parenchymatous degenerations of the organs of infants.—*Annals of Surgery.*

Sir Henry Roscoe, M. P., delivered an address at Birmingham this week as president of the Midland Institute, taking for his subject "The Life work of M. Pasteur," whose discoveries, he said, had culminated in the cure of the most dreaded and fearful of all maladies —hydrophobia. This was not the result of a happy chance, but the last link in a long chain of dicoveries, including the exterminating of cholera, of cattle disease, and of splenic fever. Thus to M. Pasteur we owed the science of bacteriology, which dealt with the intuem organisms called microbes, and which bids fair to revolutionize the theory and practice of medicine.—*Lancet.*

LITERARY NOTE.

The Home Maker.—Among the very interesting articles presented in the Christmas (December) number of this magizine, we would mention the following:

The Evidence of the Negative, by Octave Thanet; A Christmas Song (poem), by Quintero; The Angel of Poverty Gate, by Olla Perkins Toph; A Christmas Carol, Francis Howard Williamson; A Glimpse of the Persian Bazaars, by Benjamina; Bea's Whim, by Sophia May; Common Sense Temperance Talk with our Girls, Marion Harland, etc.

POINTS OF INTEREST ON THE LOUISVILLE AND NASHVILLE RAIL ROAD.

Bay St. Louis, Miss.

There is a comparatively elevated plateau of an area of approximately thirty square miles, that juts out as a peninsula into the western side of Bay St. Louis. It is separated from the mainland on the north by Jourdan River, a large, deep stream, washed on the south by the waters of Mississippi Sound, and fronts eastward on Bay St. Louis. The land of this peninsula is from ten to twenty feet above the sea level. As far back as tradition goes this immediate section was used by the Choctaws, Chickasaws, Alibamons, and other Indian Tribes as a Summer health resort, and it was even visited by the remote Natchez tribe. In the Territorial days of Mississippi it was frequented by the planters of Adams, Jefferson and Claiborne Counties, who visited it by overland roadways and bridle paths.

"The Bay," as the Anglo Saxon denizens are wont to call it, has streets along its water frontage eight or ten miles long, and magnificent shell drives extending throughout this distance. It is a compactly-built little city—as compactly as a partiality for shade trees,shrubbery, flower gardens, and grassy lawns around its beautiful villas and cool cottages will permit. Its streets near the sound and the Bay St. Louis contain large numbers of handsome private residences, and many extensive boarding houses.

Quite a number of Northerners spent a large portion of last winter in the town,and expressed high opinions of the attractions of this locality as a Winter resort. Many of the fine Summer boarding houses are kept open in Winter to accommodate the hundreds of Northern people who have found this such a pleasant Winter home. Thus, it is easily seen that Bay St. Louis, with only its present accommodations (and they are certainly most excellent), can accommodate from 2,000 to 3,000 Northern tourists every Winter. The day must come when it will find itself subjected to the demand of entertaining even a much more numerous throng from the North than that; and it seems that the people have it in their power to make the date of that day early.

ORIGINAL ARTICLES.

THE SCAPULA BRACE.

BY HARRY HODGEN, M.D., ST. LOUIS.

This brace is used wherever it is necessary to hold the scapula in place. It has been used in two cases with paralysis from peripheral neutritis. Fig. I, A., repre-

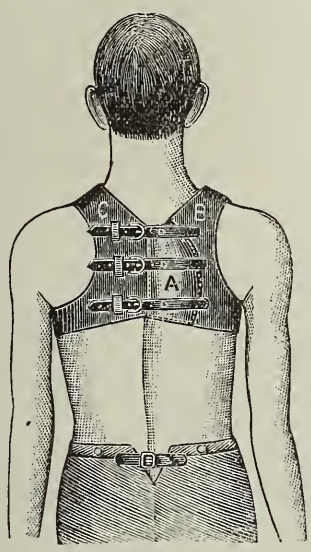

Fig. I.

sents the brace itself. This is made of gutta percha. The mold for making this piece is taken by having the patient lying face down upon a hard, smooth surface, with the arm so thrown as to produce the greatest deformity. The scapula is then surrounded by a collar of stencil board about two inches in width. After having greased the surface of the skin and the inner surface of the stencil board, plaster of Paris, to the consistency of cream is poured in and allowed to set. When this is removed the outline of the deformity is obtained. From this mold the other half is made by surrounding the mold with a piece of stencil board four inches in width, well greased on the inner surface, also the surface of the mold. In this pour cream plaster of paris. From this mold the gutta percha brace is made. Take a piece of gutta percha as large as the mold, a quarter of an inch thick, soften in warm or hot water, and screw up gradually in a vise. Care must be taken that only enough force is exerted to get an outline of the mould. Allow it to cool, and just before perfectly cold, trim off the excess of gutta percha from the edges of the mold. This gutta percha piece is then covered on both sides with wash leather. To the dorsal surface is sewed a piece of thick sole leather. This is not adapted to the form of the brace but simply extends over the flat surface of the dorsal aspect of the brace. To this are fastened the shoulder pieces C and B, B being sewed to the sole leather itself, and C being attached by the three straps as shown in cut I.

The measure for the shoulder pieces C and B is taken from the spinous processes of the vertebræ on a level with the spinal scapula around each shoulder. Fig. II, shows the front of the shoulder pieces. These are the same as the back pieces, being of soft leather. To adjust the brace apply the splint to the scapula, and tighten up the straps in the front and back so as to hold in just such a position as desired. All parts of this brace being soft leather with the exception of the one piece on the scapula, and the skin bearing the pressure of the gutta percha

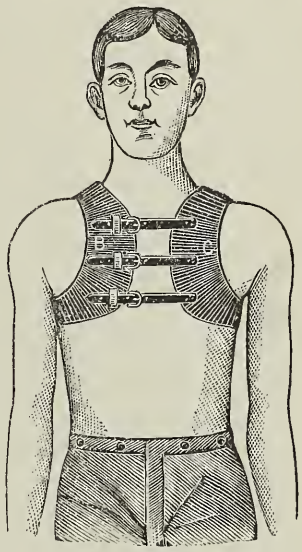

Fig. II.

well it is but a few days before the patient becomes accustomed to wearing it. After this time there is little or no inconvenience from the brace. The brace can be worn any length of time desired. It should be adjusted so as to remove the weight of the scapula from the paralyzed muscles. The muscles can then be treated in any way thought best. If the brace is properly adjusted it is not sufficient to produce an atrophy. The sharp edges of the gutta percha splint take hold of the posterior edge of the scapula, the flat surface being applied to the dorsum. This has answered admirably in two cases.

MEDICAL CO-EDUCATION.

BY MARY H. M'LEAN, M.D., ST. LOUIS.

In the Weekly Medical Review of November 2, the editor comments upon the recent action of the University of Pennsylvania in opening its doors to women, and doubts the wisdom of the change in the medical department.

An editorial comment on the same event appeared in the *Times and Register* of October 1, in which the writer expresses a belief that medical co-education "would tend to weaken the barriers of delicacy, and create a degree of familiarity, which is not conducive to moral-

ity." He questions the motives leading those of either sex to select a co-educational medical school.

The true reason for the preference of many women for old and thoroughly equipped medical schools could hardly be more concisely stated than by Dr. Putnam-Jacobi in the *Times and Register* of October 26. "Women seek these schools because in them alone can they find the solid traditions, the complete intellectual horizons which have been developing during centuries of exclusive masculine prerogative."

So far as my observation goes, all the objections to medical co-education are based upon theory. Were there no facts to disprove the theory, it would still rest on a frail foundation.

The relations of men and women as students together of all medical subjects are not comparable for delicacy with the relations of male gynæcologists and their suffering patients. Yet no male gynæcologist will deny that hundreds of refined and modest women have undergone gynæcological treatment without moral detriment either to themselves or to the physicians in charge. We see no strong editorials advocating on moral grounds the abolition of male gynæcologists, and urging women to consult only physicians of their own sex.

Aside from theory, the well established results of the experiment in one of our large schools should be a sufficient answer to all objections.

The University of Michigan first admitted women in the medical department in the year 1870, and since then has graduated 234 women.

In the first year of the experiment most of the lectures were given separately, first to the large class of men, afterward to the small class of women. In time professors grew very weary of leaving an audience of three hundred or more, whose numbers inspired enthusiasm, to repeat themselves before a gathering of from twenty to thirty.

Accordingly, in the years 1881-1882, the classes were united, and this policy has steadily gained favor. Only in the dissecting rooms are the classes separated; this is easily done with no possible loss to the women. The demonstrator goes with impartiality from one room to the other, and the assistant demonstrator for the women is a woman.

During three years of personal experience and observation in the University of Michigan I saw nothing to justify the theoretical fears of opponents of co-education. No scandals among the students came to my knowledge, and by the majority of both sexes good, earnest work was done.

Two of the professors who at its inception were seriously opposed to medical co education are now among the warmest advocates of the system.

Certainly the women who have taken degrees in the University of Michigan Medical Department will compare favorably in modesty and true womanliness with the graduates of any strictly woman's college and the men are in no way below the average medical graduates.

REPORT ON PROGRESS.

PEDIATRICS.

BY H. M. PIERCE, M.D., ST. LOUIS.

First Annual Meeting of the American Pediatric Society

Was held at Washington, D. C., September 20, and Baltimore, Md., September 21, 1889.

About twenty-five members were present, comprising most of the eastern men prominent in pediatrics.

The president, A. Jacobi, M.D., of New York, after calling the meeting to order, delivered his annual address on "The Relation of Pediatrics to General Medicine."

To copy the report of this very interesting address would consume too much space; to give a short excerpt may be doing the able doctor an injustice, but we must sacrifice the one for the many—the rule in medicine. He first shows the benefit derived from the co-operation of men, in which connection the fluency of his diction is shown in the sentences: "The isolated labors of the greatest men in the history of science never accomplished anything beyond a spasmodic and stationary advance. Twenty centuries in succession lived on the unchanged teachings of Hippocrates, Aristotle and Galen." He foretells success for this society for "the spontoneity of its origin is a guarantee of vitality and prosperity." Pediatrics should be considered a specialty, not that it is one in the common acceptation of the term, for it does not deal with one organ, but with the entire organism, at a time when it presents the most interesting features to the student of biology and medicine.

"Pediatrics does not deal with miniature men and women, with reduced doses and the same class of diseases in smaller bodies, but it has its own independent range and horizon and gives as much to general medicine as it has received from it."

The surgery of infancy and childhood occupies a large part of the transactions of surgical societies and journals. The relation of pediatrics to neurology is very close, he says, and cites as evidence the researches of Saltmann, in which he proves when the motor and sensitive irritability appear, and when they grow and when the awakening of perception takes place. Neuro-pathology also owes a great many results to the observations made on children, as an evidence of which, he says that disorders of the nervous system are very common in the young, and that of all the deaths resulting from diseases of the nervous system, 85% take place during the first five years of life.

Psychology, which he calls neurology's sister, owes much of its wealth to the study of the intellectual life of infancy and childhood, and in this connection refers to the researches of Kustmaul, the younger Darwin and A. Preyer. Psychiatry also has learned from the men-

tal aberrations occurring at an early age, the more so as many of the causes of mental diseases in later life must be traced back to embryological date and the morbid changes of infancy. He has given many interesting proofs of this connection, *e. g.*, asphyxia of the newly-born, with its resulting effusion, extravasations or thromboses, is a frequent cause of life-long epilepsy, stupidity or idiocy. But to the history of the embryo and fœtus which finds its legitimate termination in that of the infant and child, we must turn, and with the allied chapters, pedology and teratology, we study the first three chapters of the same book—pediatrics. In this connection comes Cohnheim's theory of neoplasms —the different malformations with the different hereditary faults.

He inveighs against the almost universal practice of bringing about physical and mental exhaustion by the false methods of schooling children, the long hours of study and the short ones of recess, the large book and the small print, and many other glaring faults caused by those matters being left to the decision of school-boards, consisting of coal merchants, carpenters, cheap printers, and undertaught or over-aged school mistresses, and not to the physicians. The sad results of constitutional and infectious diseases upon the young might be greatly reduced by avoiding contagion.

"If we would but concentrate our means on fighting preventable disease and death, as they concentrate them in Europe for the purpose of preparing for and carrying on wars—if we did, we should save as many hundred thousands as they seek to destroy." He then at length enumerates the many and lasting blessings to their country, to humanity and to themselves which will grow out of the work done by the combined efforts of the American Pediatric Society.

Double Empyema.

Francis Huber, M.D., read a paper with this title before the American Pediatric Society. He reported two cases, both of which are interesting, made so particularly by the discussion which followed, as to etiology and treatment. The first case was that of a boy, æt. 14 years, who had fallen into an excavation, eighteen feet deep, January 4, 1889. He was taken out unconscious and thoroughly drenched with water to restore him. There was no injury detected, either to head or chest. Within a few hours he was seized with a chill, and every sign of pneumonia presented, even to a bloody expectoration. On the third day the writer, who then saw him for the first time, made a diagnosis of double pleuro-pneumonia. At that time the right side was flat on percussion; the heart very weak.

On the fifth day the condition was much worse, so serious, indeed, that a careful physical examination by the consultant, Prof. A. Jacobi, was deemed inadvisable. Respiration, 60; pulse, 150, and very weak; temperature, 104.5° (rectal). As there was pulmonary œdema present anteriorly, a bad prognosis was given. On account of the great weakness no operative interference was indicated, but free stimulation was ordered. Half an ounce of brandy every half hour, one minim of fluid extract of digitalis with three grains of camphor hourly, and carbonate of ammonia every two hours. Morphia was administered hypodermically.

A fortnight later pus was found in the right pleural cavity by exploratory puncture.

January 31 (27th day of illness) a pint of pus was drawn from the right pleural cavity with the aspirator, lymph preventing further flow of the fluid. February 2, the left pleural cavity was opened below the angle of the scapula posteriorly, and two large drainage tubes being inserted, a large quantity of pus escaped; no broken down clots or other evidence of old hæmorrhage into the pleural cavity. Irrigation with hot water was then practiced which brought out lymph masses. Iodoform with bichloride gauze and borated cotton dressing applied. Ribs not resected nor anæsthetic administered as patient was too weak. Four days later the right pleural cavity was opened in similar manner, with similar result as regards contents. The treatment was the same. For some time the urine contained albumen.

Five weeks later the tubes were removed and one month after this the sinuses had completely closed, and an ugly bed-sore which had appeared over the sacrum had healed.

Pulmonary expansion complete; no retraction of chest wall; breathing distinct over both lungs. No dulness; general condition excellent. Appetite good.

The second case was that of a boy, æt. 5½ years. He fell from the seat of a wagon and lost consciousness for a short time, after which he played around for several hours. He now began to complain of headacce, vomited once, and soon became feverish and delirous. A week later the fever continued at 104° to 105°, some cough present. The patient fell into a typhoid state with diarrhœa, dry brown tongue and great prostration. This case then was found to be like the one just reported and was treated in the same way.

The patient was well at the end of nearly three months.

The author then calls attention to several points of interest.

1. The bilateral character of the disease.

2. Both preceded by a fall, though a causal connection could not be traced in either case between the source and the empyema.

3. Case I had had psoriasis for years which was general and he had been drenched and exposed afterwards.

Case II had very poor hygienic surroundings, which contributed to the grave type of inflammation.

4. The chest cavity was not opened for a fortnight after the presence of pus had been discovered with the exploring needle, as his feeble condition was thought to counter-indicate an operation. For the same reason anæsthetics were not used.

The fluid used to irrigate was a 1 to 10,000 bichloride solution.

The doctor found no literature on this subject, even in such works as Pepper's System of Medicine. About a dozen cases of double empyema have been reported.

Dr. Caillé did not consider it advisable to allow pus to remain in the cavity but would evacuate as soon as discovered.

In perityphlitis, in exceptional cases, the pus may be permitted perhaps to remain for a time, if the patient is in a condition of collapse, where an operation might prove fatal.

In pyothorax the pus is a direct impediment to the circulation by its compression of power of the lung, and it should be removed promptly.

Dr. H. Koplik would not irrigate the cavity too frequently, usually only once, immediately after operation.

The re-expansion of the lung and attacks of coughing sufficed to force the pus out and irrigation might injure the lung.

He doubted the probability of empyema being the result of traumatism where there was no actual penetration into the pleural cavity or solution of continuity of the skin.

Dr. William Pepper referred to the strong tendency of unilateral empyema in children to recovery under any careful mode of operative treatment. He had operated without incision over one thousand times in cases of pleural effusion, and in no case had there ever been any serious consequences resulting from the operation itself. He could not remember how often he had operated for empyema in children, but no less than thirty or forty times. Recovery had invariably followed.

The operations were by aspiration, with subsequent thorough drainage and careful asepsis. In some cases the drainage tube was passed around a rib by means of a curved needle. Or the drainage tube was passed through the canula into the chest, after the collection had been evacuated. He could not give specific advice as to the operation in double empyema save that in children it should be done as simply as possible. If the condition is diagnosed promptly and treatment is at once instituted the prognosis is good.

Dr. William Osler makes free, full and satisfactory incisions in case of adults, but in children aspiration should be tried first, as this comparatively simple operation often is followed by a complete cure. If pus again accumulates hedoes not aspirate but makes an incision and drains.

Dr. C. P. Putnam was not in favor of irrigating without some special reason for it.

Dr. W. L. Carr does not irrigate in cases of empyema, and uses antiseptic precautions in dressing the wound. A case just seen did not have any rise in temperature after operation though irrigation had not been practised.

Dr. L. Emmet Holt agreed subtantialy with the remarks of Drs. Pepper and Osler as regards drainage and no irrigation.

Dr. J. H. Fruitnicht thought incision was proper but irrigation seemed to irritate the lung.

Dr. H. N. Vineberg thought that the general practitioner did not make exploratory puncture often enough and for that reason cases of empyema are often overlooked and wrongly treated for months.

Dr. A. V. Meigs warned against making the incision too low, for one case under his charge, on autopsy, revealed a large quantity of pus not drained because the granulations from below had occluded the drainage tube.—*Archives of Pediatrics.*

A Fatal Case of Carbolic Acid Poisoning.

Dr. A. Richmond in the last *New York Med.Jour.*, reports the following case:

On July 26, 1889, at the noon hour, a child æt. 7 months received a superficial burn on the left thigh and arm from a cup of coffee. A mixture of equal parts of carbolic acid and sweet oil was applied by the mother, being a recipe taken from a domestic medical book in her possession. About half an ounce of 95% carbolic acid was thus used. In two hours the child passed into a condition of stupor, which continuing, alarmed the family, and I was summoned.

Arriving at 7 P. M., I found the child lying quietly with the exception of an occasional movement made by flexing the legs upon the thighs and these upon the abdomen, and then forcibly extending them. The eyes were fixed, the pupils contracted to the size of a pin's head, the pulse 120, weak, breathing irregular, occasionally sighing, swallowing performed with great difficulty, mucus expectorated rather than vomited, the odor of carbolic acid being plainly perceptible in the breath.

Not having atropine with me, I administered 4♏ of fluid extract of belladonna by the mouth, a portion of it being rejected. At the end of an hour the pupils began to dilate, a slight blush was perceptible and swallowing less difficult. A small quantity of whisky was then given with 2♏ of belladonna.

At the end of another hour the pupils were normal, the erythematous blush quite perceptible, swallowing somewhat improved, pulse and respiration the same. Learning that no urine had been passed since noon, and not desiring to substitute belladonna for carbolic acid poisoning, I discontinued the former and ordered small doses of nitrate of potassium and whisky to be given at intervals during the night.

At 7 o'clock next morning, the pulse was 160, weaker, temperature 103°F., face blanched, pupils larger than normal, eyes fixed, the child lying quietly. The mother showed me a napkin with a dense smoky stain, three of which had been removed during the night, adding that the stains would not wash out.

The child continued to grow weaker, the pulse rising higher until convulsions set in at 5 o'clock, and death occurred an hour later, 30 hours from application of acid. No post-mortem was allowed.

Poisoning From Gasoline.

The *New York Med. Jour.*, has an article by Dr. J.

G. Biller, with this title, in a recent number.

The writer failed to find any literature on this subject save in the National Dispensatory and that was meager.

He reports two cases.

1. Infant, æt. 18 months, drank part of a gill of gasoline and spilled the rest on the front of its dress, walked into the next room and was found unconscious on the floor where it had fallen.

This had all taken place within a space of five minutes. The physician saw him ten minutes later, presenting the following conditions: "Unconsciousness, breathing or gasping about eight to the minute; pulse imperceptible at the wrist; the pulsation of the heart scarcely distinguishable; the eyes rolled back, and the face livid. The jaws firmly closed, the arms extended and rigid, and the legs limber, skin of neck and chest bright red from the spilling of the oil.

The abdomen was terribly distended and tympanitic and the surface of the body cold and clammy." Treatment consisted in a warm bath and an attempt at giving an emetic which failed as any such attempt caused strangulation. A few minutes in a bath caused the child to revive somewhat as the breathing grew more natural, the limbs relaxed and consciousness was partially regained. Two minutes later it suddenly died, 30 minutes after drinking the gasoline. Copious movements of the bowels had taken place while the child was still in the bath.

The doctor was desirous of giving stimulants hypodermatically and of washing out the stomach but did not have the appliances at hand for such treatment.

2. Infant, æt. 19 months, while in the act of raising a can containing gasoline, its mouth was seen by its mother, who screamed, causing it to drop the can, but not before a swallow had been taken.

The physician saw the child in less than three minutes. Its condition was similar to that of case 1. Twenty drops of ipecac were given by the mouth, two drops of fluid extract of brandy were given hypodermatically.

Stomach washed out with an Allen's Surgical pump, till the water came out clear. All the ejecta had a strong gasoline odor.

Nitrate of amyl inhalations caused the pulse to appear though relapses were frequent, the good effects of this stimulant were immediately noticed on the pulse, at each application. In one hour and a half the patient was pronounced out of danger.

Fatal Alcoholic Poisoning in a Child.

A boy, æt. 5 years, was in poor health, playing on the street when his mother called him in for dinner. A few minutes elapsed from the time the child was called until the mother was prepared to place him at the table, not over twenty minutes.

When she looked around for the child she saw that he appeared to be intoxicated. In the room where he had been there was six or eight ounces of whisky, which had disappeared. This occurred between 12 and 12:20. The child was put to bed to sleep the liquor off. After taking the whisky the child became blanched and was followed in an hour or so by purging and vomiting. About 6 o'clock I saw the child. It had a rapidly running pulse and a normal temperature. The pupils dilated and did not respond to light. There was occasional twitching about the face and slight tremor about the hands and fingers.

The breath of the patient had a distinct whisky odor. I did what I could for the patient under the circumstances. I gave it bromide of potassium and coffee. I saw it again at 11 o'clock and found it in general convulsions. It died about half past 11, eleven hours from the time it took the liquor."—Dr. MacFarlane, Allegheny Co. Med. Society, in *New York Med. Jour.*

Quinine for Whooping Cough.

Whooping cough is so persistent a disease in young children that a whole pharmacopœia of drugs has been tried and discarded in its treatment. Quinine was first suggested by Binz in 1868 on the strength of its strong antiseptic powers and on the assumption that the disease has a parasitic origin. Fervers has collated all that has been written, a goodly number of papers, on this subject and has briefly recapitulated them. Most authors have had some benefitf rom it; a few others, of whom Henoch is the best known, reject it as useless. Binz believes it of much value, but it must be given in large doses, and continued for a considerable length of time. It has been given by the mouth, by the spray and by subcutaneous injection. In this paper some experiences of the last-mentioned mode of using quinine are related and the author claims he has met with much success, but while some of the cases have been benefited promptly and permanently, in others there was little definite improvement, and in several there was a relapse. Nor were the injections without their drawbacks. In many cases the skin at the point of puncture was indurated and inflamed and in several of them there was some sloughing. The preparation used on account of its solubility was the carbomide (a combination of hydrochlorate of quinine with chemically pure urea); about three grains were injected once or twice a day. This treatment was carried out under the direction of Prof. Ungar, of Bonn, in his polyklinik. The final advice is that this method of administering the drug should be reserved for those cases in which it can not be taken in any other way.—*Archives of Gynæcology, Obstetrics and Pædiatrics*, November, 1889.

A Plan for Relief of Whooping Cough Spasms.

Dr. Naegeli, in the *Schweizer Aerzte*, pays particular attention to the convulsive act of choking, describing the latter as follows:

Spasm of the glottis makes easy inspiration impossible, tonic convulsions of all laryngeal muscles follow, all muscles of the throat and last those of the face also

share in the attack. Trismus almost always is present during the acme of the convulsion, although the tongue generally protrudes. As soon as it is possible to open the rima glottdis again so far as to admit of sufficient air for respiration, all sensation of choking and congestion of the blood with their sequelæ disappear as by a miracle. Heiberg was the first to observe that the raising of the upper jaw is the best method of making the larynx admit air, and he recommended a plan for the purpose, and which Naegeli has modified and described as follows: Standing in front of the child, the nurse lays firm hold with the index and middle finger of the ascending ramus of the lower jaw in front of the ear, places both thumbs against the chin and by strong but gentle traction and pressure moves the lower jaw forward and downward. If the mouth is a little open the jaw may be fixed by placing the thumb or index finger alone behind the anterior lower incisors and grasping the chin with the rest of the hand performing traction as above. In all these cases the left hand rests on the forehead of the patient and performs counter-traction. If the nurse is behind the patient, she may place both thumbs close above the angle of the jaw, the index on the zygomatic arch and the rest of the fingers on the chin, pushing forward and downward. Immediately the upper jaw is raised the child must be told to draw a deep breath. This plan may be adopted even if the fit comes on during sleep and Naegeli says that if so the child does not wake.--*Archives of Gyn., Obstet. and Pediatrics*, November, 1889.

TRANSLATIONS.

FROM THE GERMAN.

By W. C. Mardorf, M. D., St. Louis.

The Treatment of Croupous Pneumonia with Calomel.

Dr. Enrico Pieragnoli, in *Le Sperimentale*, pleads for the more general use of calomel in croupous pneumonia. His method consists in the use of calomel combined with opium, and in the discarding of expectorants during the first few days of the disease. The results were very satisfactory; five adult patients not treated with calomel all died (the treatment which they received is not stated); of fifteen cases in which calomel was employed but one died. The results in children were equally good. The course of the pneumonia treated by calomel was milder, and the solidification was not so firm and had less tendency to spread. Even the diarrhœa which resulted seemed to exercise a favorable influence upon the course of the disease.—*Cent. f. d. ges. Ther.*

Butylchloral in Neuralgia.

In addition to its sudorific property, butylchloral seems to exert an almost specific influence over the trigeminus nerve, which is anæsthetized throughout its course by the internal administration of from one to three grams (15–45 grains). Prof. Liebreich of Berlin uses the following in trigeminal neuralgia:

℞ Butylchloral,	-	3.0–5.0 (45–75 grs.)
Sp. Rectif.,	- - -	10.0 (ʒijss.)
Glycerinæ,	- - - -	20.0 (ʒv.)
Aq. Dest. ad.,	- - -	120.0 (℥iv.)

M. Sig. Two to four tablespoonfuls at a dose.—*St. Pet. Med. Woch.*

Morphia in the Stomach after its Hypodermatic Administration.

Alt, of Halle, has been able to verify the observations of other physiologists by finding morphia in the stomach of the dog shortly after the subcutaneous administration of the drug. The contents of the stomach were procured by washing or by causing the dog to vomit. The reaction was plainly apparent two and a half minutes after injection, was strong at five minutes and remained so for twenty-five to thirty minutes; after fifty to sixty minutes no reaction could be obtained. In small doses usually sufficient to cause vomiting, this effect could be avoided by washing out the stomach. From this Alt concludes that the emetic effect of morphia is a reflex result of its presence in the stomach, contrary to the belief of a direct irritation of the center for vomiting by the presence of the alkaloid in the circulation, either with or without its conversion into apomorphia. By washing out the stomach, lethal doses were rendered harmless. Alt estimates the amount of morphia excreted by the stomach as one-half of the amount injected.

Doses of one-half grain were given to three men subcutaneously, and morphia was found in the gastric contents for about forty minutes. No toxic effect was noticed in spite of the size of the dose and the fact that neither of the individuals was accustomed to the drug. Alt, therefore, recommends washing out the stomach in cases of morphine poisoning by hypodermatic injection. In medico-legal cases it is important to examine the contents of the stomach.—*Berlin Klin. Woch.*—*St. Pet. Med. Woch.*

For the Night Sweats of Phthisis.

For the relief of this distressing symptom Alexander has employed subcutaneous injections of the officinal oleum camphoratum with excellent results.—*Deutsch. Med. Woch.*

Ural, a New Hypnotic.

Gustave Poppi describes a new hypnotic, under the name of ural, obtained by the action of chloral hydrate upon urethan. He states that in the ordinary doses it causes sleep more profound and of longer duration than any of the other hypnotics. He points out that even

when the drug is given continuously for several days there are no unpleasant symptoms. Therapeutic doses cause no change in the blood pressure. On awaking there is no feeling of discomfort or languor. It has been given with the best results in diseases of the heart, hysteria and other nervous affections.—*Deut. Med. Woch.* —*St. Pet. Med. Woch.*

Treatment of Erysipelas.

In a discussion at the Hamburg Medical Society on the treatment of erysipelas, Unna said that the dermatologists were now able to get along without the aid of the surgeon,inasmuch as ichthyol and resorcin answered every purpose. He advises that the latter be used in the form of a paste, as follows:

℞	Ungt. zinci ox., - - -	19.0
	Terræ silicic., - - - -	1.0
	Resorcin, - - - - - -	20.0

For erysipelas of the scalp a 10% alcoholic spray of resorcin should be used, followed by its inunction, dissolved in oleum lini.

Changes of the Long Bones in Bronchiectasis.

It is a wellknown fact that in phthisis and other wasting diseases the ends of the fingers have a tendency to become club-shaped, and that similar changes in the long bones often take place in bronchiectasis. Bamberger (*Wien. Klin. Woch.*) had his attention attracted to the painful swellings of the epiphyses which occur only in bronchiectasis. In a case which reached the post-mortem table he found that the pathological changes consist chiefly of thickening of the cortical portion with increased density of the cancellous portion of the epiphysis. He believes these changes are due to the absorption of some as yet unknown substance existing in the bronchial secretions of these cases, which is capable of exciting such an inflammatory action in the bones, just as mother-of-pearl dust, arsenic and phosphorus are also capable of exciting such action. He proposes to investigate the matter experimentally.—*Med. Chir. Rundsch.*

The Influence of Olive Oil upon the Secretion of Bile.

Dr. Siegfried Rosenberg, in *Fortschritte der Medizin*, states that the results in the treatment of gallstones by olive oil in large doses induced him to study the action of olive oil upon the bile in dogs, by means of permanent biliary fistulæ. He found that there was a very considerable increase in the quantity of bile secreted, with a decrease in its consistency. Olive oil therefore brings about those conditions which are requisite to the removal of gallstones.

An Interesting Case of Catheterization.

Dr. Ernest Bruckner, (Gyorgyaszat),was called to see an old man, æt. 75 years, who had not been able to urinate for twenty-four hours, and who had difficulty in urinating for some time previously. On examination the bladder was found to reach almost to the umbilicus, and the middle lobe of the prostate was much enlarged. Bruckner catheterized with a No. 20 new, and undoubtedly aseptic metallic catheter, withdrawing about a quart of alkaline urine. He then proposed to wash the bladder out, but was not allowed to do so. Three days afterward Bruckner was again called to see the patient, who had meanwhile staid in bed, passed but a scanty amount of urine, and complained of headache.

He found the patient unconscious and cyanosed, with convulsions of the face and extremities, stertorous breathing, and a small, rapid pulse. Death ensued in a few hours. In this case uræmia and death followed catheterization so rapidly as to indicate a causal relation, and it will serve to stimulate the anxiety of those who believe that catheterization in aged people is dangerous. There are two explanations for the outcome. One, the older of the two, that suddenly emptying the distended bladder in the aged not only caused serious circulatory disturbances by removing a great pressure, but also set up an acute inflammtory process of the urinary passages, thus determining a uræmia. A plausible explanation is that of acute infection. The ammoniacal and decomposing urine forms a favorable soil for the development of micro organisms, which easily pass through the dilated ureters to the kidney, where they light up a purulent inflammation. The latter is in many respects the more acceptable of the two.

Believers in the first theory will relieve the bladder gradually, and never entirely; believers in the second theory will empty the bladder and wash it with a solution of carbolic or boracic acid, allowing some to remain in the bladder.—*Pest. Med. Chir. Presse.*—*Med. Chir. Rundschau.*

Phosphorus in Deafness.

For the difficulty of hearing which so frequently accompanies age, provided no nerve trouble exists, Dr. Sabolins uses a saturated solution of phosphorus in olive oil, painting it upon the auditory canal and the tympanum with a camelshair brush. Of a total of 69 cases 62 had their hearing improved. Under this treatment the tympanic membrane becomes softer, and more elastic and vascular.—*El Siglo Medico.*—*Deutsch. Med. Zeit.*

Antipyrin and Oxymel Scillæ in Whooping Cough.

Schnirer (*Arch. f. Kinderheilk.*) has used antipyrin to a great extent in pertussis at the clinic of Prof. Montis, and has come to the conclusion that antipyrin does not noticeably influence the course of pertussis one way or the other, and that least of all is it entitled to the term of "specific" in this disease, as has been stated. On the other hand he noticed in 12 cases a considerable de-

crease in the number of paroxysms after the administration of oxymel scillæ in tablespoonful doses every ten or fifteen minutes between 4 and 5 o'clock every afternoon. It did not influence the duration of the disease, and no disagreeable after-effects were observed.—*Wien. Med. Woch.—St. Pet. Med. Woch.*

A New Symptom of Locomotor Ataxia.

Dr. Thiem (*Verein Kottbuser Aerzte*) had occasion to chloroform an ataxic woman for the more thorough examination of an abdominal tumor, and noticed, as she was being led out of the room afterward, that her gait showed exceedingly wellmarked ataxia, whereas other, not ataxic patients under the same conditions simply dragged their legs along. The explanation is very simple; the sense of sight and the muscular sense, which are much reduced in ataxia, and which are essential to the regulation of the gait, are still less to be depended on when the patient is partially narcotized. Thiem therefore suggests chloroforming doubtful cases of tabes, to elicit the ataxia if present.—*Deutsch. Med. Zeit.*

The Local Treatment of Diphtheria with Bichloride of Mercury.

The solutions of our most useful antiseptics, carbolic acid and corrosive sublimate, have the disadvantage that they coagulate albumen, and where used locally in diphtheria they thus erect a barrier which opposes their further action. To avoid this, Dr. Pennert (*Berl. klin. Woch.*) employed the method suggested by Laplace of adding to a 1-1000 solution of sublimate five parts of tartaric acid. This solution he employed in 62 cases of diphtheria, covering 14 months, and with excellent results. He dipped into the solution the end of a probe wound with absorbent cotton, and wiped off the membranes from above downward. This left a raw, bleeding surface, which was once more wiped off with the solution. This process was repeated in an hour, and again in from 6 to 12 hours, by which time the fever was usually gone. If such was the case, he simply painted the parts morning and evening a few times. He rstates that entire removal of the membrane is essential to the success of the procedure. From the limited du ation of the disease he has had but few complications. To meet the objection that sublimate may be absorbed in poisonous doses, he states that for one such application he used but 5ccm. of the solution, containing .005 ($^1/_{12}$ grain) of sublimate.—*Med. Chir. Rundsch.*

Another Enemy of Mankind.

Prof. Gaertner, of Jena, has recently discovered a new bacillus, which he has named the "bacillus enteritidis." Some time since a cow which was suffering with diarrhœa was killed at a farm in the vicinity of Frankenhausen. Examination revealed nothing but a few red points in the intestinal canal, which did not appear to be sufficient ground for declaring the meat of the animal unfit for consumption. Shortly afterward, however, a young laborer became sick, who had eaten a little of the meat in a raw state, with salt and pepper. Persistent vomiting, and an uncontrollable diarrhœa preceded his death, which took place in 36 hours; a post-mortem revealed general inflammation of the intestine, while the blood was found either clotted or black and tarlike. This was the first and only fatal case.

Five days afterward 12 men, who had eaten the meat raw, became ill, and these were followed by 36 men, who had partaken of the meat boiled. All the patients showed symptoms of toxic poisoning, manifested by frequent vomiting, severe abdominal pains, a condition approaching collapse, and in many instances muscular cramps. All recovered within from three days to four weeks; in four cases there was exfoliation of the skin of the entire body, including the palms of the hands and soles of the feet. Numbers of bacilli were found in the beef, as well as in the intestinal canal of the fatal case, which multiplied rapidly on gelatine and other soils. This bacillus, which Gaertner has christened the "bacillus enteritidis," as above stated, is so hardy that four days immersion in alcohol did not seem to diminish its powers of multiplication. When any of the culture was boiled, a toxic agent was left in the water, which was so powerful that very small doses sufficed to kill mice, rabbits and guinea-pigs; even a bouillon prepared from sound meat which been previously rubbed with a little of this poison, produced instantaneous death when injected under the skin of the above-named animals.—*Revue Scientifique.—Allg. Med. Cent. Ztg.—Med. Chir. Rundsch.*

A Simple Method of Reducing Fresh Dislocations.

Dr. Julius Kremer of Waitzen has described a new and simple method of reducing dislocations of less than two weeks' duration, in which the result is effected easily, without the use of anæsthesia or extension and counter-extension. The object of this method is to avoid the muscular contractions, which offer the greatest obstacle in other methods of reduction; this is obtained by a sudden jerk, which by its swiftness evades the contractions. The procedure is modified according to the nature of the dislocation; Kremer describes that for the reduction of a shoulder dislocation as follows:

If the surgeon is a small man, the patient is seated upon the floor, but if the surgeon is of large stature, upon a footstool; an assistant kneels by the side of the patient, and steadies the patient's shoulder by placing his forearms together upon it. The surgeon then raises the patient's arm until some slight resistence is felt, not enough to produce pain, and then, in the case of a left-sided dislocation, he grasps with his right hand the patient's arm from the outer side about its middle, and with his left hand he grasps the arm just above the elbow from the inner side, so that the patient's forearm

rests upon the operator's left forearm. The arm is then suddenly jerked; in a forward dislocation, the motion is outward, upward and a little backward; in a dislocation backward, it is forward, upward and outward; and in a downward dislocation it is upward and outward.

According to his representation, the manœuver—the description of which is somewhat lacking in clearness—is so easily performed that in winter it is unnecessary for the surgeon to remove his overcoat. No snap is heard on reduction, as the muscular action which causes it is wanting. It is also of importance that the patient should not be told of the intended procedure.—*P. Med. Chir. Pr.—Deutsch. Med. Ztg.*

Posterior Incision in Empyema.

Dr. Guido Turazza believes that the eighth intercostal space posteriorly is the best space for an incision in empyema, as the pus is more apt to accumulate there than elsewhere, and therefore drainage is better. He holds, further, that wounding the intercostal artery and nerve is impossible at this site. He states that his results have shown the justice of his claim, and that it holds good for puncture and operation as well.—*Cent. f. Chir.—Deutsch. Med. Ztg.*

Gonorrhœa in Women.

At the late International Congress for Dermatology and Syphilography, Dr. Eraud said that a purulent vaginal discharge no more meant a vaginitis,in every case, than did a purulent urethral discharge in the male mean gonorrhœa. So far as the microscopic diagnosis of a vaginitis was concerned, pus from a vulvitis is not different from that of an inflammation of the anterior or posterior fornix, though differing in appearance.

But in most cases of purulent discharge there is really no vaginitis. The vaginal mucous membrane is not favorable to the production of pus per diapedesin; furthermore, the gonococcus does not readily develop in the vagina. Quite the reverse is it with the uterus, and especially the cervical portion which is apt to be the seat of a primary inflammation, the products of which are afterward found in the vagina. The gonococcus is therefore intra uterine, and any vaginitis that may exist is a secondary affection, called forth by the metritis. But while in a hundred cases of gonorrhœal urethritis the gonococcus may be found in every one, its presence can be confirmed in only about half the cases of metritis. There are three grades of this form of metritis: 1. A hyperæmic metritis with pus, but without ulceration. 2. A metritis with ulceration, the favorite site of which is the posterior lip. 3. A chronic form of hyperplastic metritis, associated with the formation of ovula of Naboth. This latter form has no influence upon a coexisting pregnancy.—*Sem. Med.—Deutsch. Med. Ztg.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,
EDITOR.

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SATURDAY, DECEMBER 21, 1889.

Morphine in Uræmia.

This is a subject which has been attracting some little attention of late, several cases of uræmia being reported in which morphia is said to have had a wonderful effect as well as in other symptoms, as headache, etc., dependent on an excess of uric acid.

The subject is of the more importance, in that morphia has not heretofore had the standing of an orthodox remedy in such troubles; indeed, many practitioners have considered and still do consider its use highly improper.

Dr. F. J. Bowles reports to the *Medical Record* a case of uræmic convulsions from acute nephritis occurring in a girl æt. 13 years. He employed means for increasing the activity of the skin, bowels and kidneys, with partial success, but this was followed shortly by total suppression, with severe convulsions rapidly following one another.

The general condition pointed to speedy dissolution; he gave hypodermatically, morphia sulphate combined with atropia, to endeavor to secure relaxation, and the patient immediately began to improve in every respect, recovery being uninterrupted.

In this connection a paper by A. Haig, M.D., in a recent number of the *Brit. Med. Jour.*, contains some interesting experimental investigations in the same direction. He states that when morphia is given there is a fall of arterial tension followed by the retention of uric acid, which is temporarily insoluble in the state of increased acidity of the blood. The acidity of the blood is highly increased, while the excretion of urea and uric acid is much diminished. With this there is a condition of mental brightness and a sense of well-being; headache, mental depression, and any manifestations of uræmia, if present, are relieved. In about 12 hours,

however, comes the rebound, the so-called after-effects; there is headache, high tension and pulse, and mental depression, which can be quickly removed by another dose and so the vicious opium circle becomes established.

He believes that some drug which would promote the free elimination of uric acid, and would, at the same time, hold it in solution without causing symptoms, would be able to break through the opium circle.

Opium acts by hindering peristalsis according to his idea; some of the fluid as well as the acid which gives the fæces their reaction passes into the circulation; this increased acidity, as above stated, lessens the solubility of uric acid, increases tension, etc. He believes that a similar explanation accounts for the same action of acids, ale, stout, champagne, port and sherry, many acid, but non-alcoholic beverages in common use, tobacco-smoking and various other drugs noted below.

In conclusion, his position with regard to opium and morphine amounts to this: A large number of drugs—iron, lead and mineral acids and their salts, antipyrin (?) nitro-glycerine (?)—have one effect in common, namely, that of diminishing the excretion of uric acid in the urine, that is, he believes, driving it out of the blood into the liver, spleen, joints, etc. Exactly contemporaneously with the diminished excretion of uric acid due to any of these drugs comes a fall of pulse tension, and a mental condition of brightness and well-being. Uric acid headache or mental depression, if present, are cured and in their place come pricking and shooting pains in the joints, most marked in those who have previously suffered with gouty arthritis. On the other hand, an alkali, as soda or potash, while increasing the excretion of uric acid, produces symptoms which are the exact reverse to those above mentioned. As these drugs have no obvious properties in common, he infers that the results they produce are due to their action on uric acid, which he has pointed out in previous papers. Opium and morphine, as we have seen, diminish the excretion of uric acid, and at the same time reduce pulse tension, causing mental brightness and well-being, cure a uric acid headache, and cause at the same time pricking and shooting pains in the joints; they, therefore, belong to the iron, lead, and acid group of drugs with which their effects exactly correspond, and as they always cause a marked rise in the acidity of the urine, he concludes that their action on uric acid is the result of their action on acidity.

With regard to convulsions, he has pointed out the relation of some cases of epilepsy to the excretion of uric acid.

It has been noticed that morphine is of much use in certain uræmic and puerperal convulsions which are generally accompanied by a high tension pulse. He now suggests that its curative action in these troubles is also due to its effect on uric acid, and that further investigation may show that these convulsions, like some of those of ordinary epilepsy, have a more important relation to the excretion of uric acid and its effects on pulse tension than has hitherto been suspected.

Further investigations on this subject will be awaited with interest; the fact, however, seems fairly well established that morphia is a powerful weapon in uræmic manifestations; it is double-edged, though, and its use requires the utmost caution.

Practical Points in the Treatment of Syphilis.

In an interesting article on the above subject in *Medical News*, R. W. Taylor, M.D., says that "since the adoption of the long mercurial courses, an easy-going, happy-go-lucky feeling has taken hold of many physicians in their treatment of syphilis," and he is probably right in his belief. The teaching that syphilis can be cured, but that a treatment of two or three years is necessary, has engendered a feeling of false confidence and a tendency to superficial routine. It is true that syphilis can be cured, but constant care and watchfulness are necessary; mercury should be pushed, but still kept well in hand, so as to get all the benefit, and avoid all drawbacks and harm from its use.

Syphilis cannot be aborted thoroughly in its primary stage, whether by excision of the chancre and neighboring glands, by cauterization, or by early mercurial treatment either per os or hypodermatically, as suggested by Bronson. Treatment should not be begun until the secondary stage. Of the three methods of treating syphilis, the expectant, or symptomatic, is unscientific and dangerous. The continuous, or tonic treatment, induces a condition of tolerance to mercury, and may not only have no effect upon existing lesions, but this tolerance may be lasting and may render more remote the hope of lasting benefit from the rational use of mercury in the future.

The treatment by interrupted courses is the most preferable, and the most practicable and satisfactory to both physician and patient, and promises a cure almost positively to a patient in ordinary health who will systematically submit to it.

The best preparations of mercury for administration by the mouth are the protoiodide, in $^1/_5$ to $^1/_2$ grain pills or tablets three, four or five times a day, according to the kind of patient and the behavior of the symptoms, and the tannate (hydrarg. tannic oxydal) in $^1/_2$ to 1 grain doses. The early mercurial course should be active and should last at least three months, and if possible four and five months. In most cases, at the end of three months, the patient's condition will be found to be so reassuring that a stoppage of the dose may be allowed for one to three weeks. The next course may last but two or two and a half months followed by four weeks' intermission. Then the medicine may be used again in the same manner. During the second year the iodide of potassium may be combined with the mercurial salt, using either the bichloride or the biniodide. During this second year, all things being favorable, the intervals may be lengthened, though a full dose of the combined drugs should be given when treatment is being followed.

The morale of the patient is always much improved by these periods of liberty. Syphilis in private practice is different from that of dispensary and hospital practice, in that perfect cures are obtainable, while in the latter we really practice a series of patchings-up, as we may say.

All syphilitic lesions, even the most minute, are to be feared as possible resources of continuous or intermittent reinfection of the system. When lesions have become a little old, mercury by the mouth does not invariably act radically upon them, and we gain by bringing the remedy into more intimate local contact with these infecting foci. It is a valuable rule never to be content with the action of mercurial pills, unless we see a decidedly rapid subsidence of the lymphatic ganglia. Mercurial inunctions, though largely used abroad as routine treatment, are to be preferred as adjuvants and emergency resources, and the same is true of hypodermatic injections and fumigations. The early rashes of syphilis, both active and chronic, are best treated by inunctions. When the eruption has disappeared the pills are resumed again and the ointment discontinued. Unusually large infiltrated syphilitic ganglia, wherever situated, are signs of evil omen, and as a general rule may be said to require active regional treatment. Well-ordered, carefully applied local treatment is efficacious in syphilitic neuralgias in general, in syphilitic eye troubles, and in appropriate cases of meningeal and cerebral disease, applied with precautions upon the neck and under the jaws, and even upon the temple and occiput. When mercury is being rubbed into the neck we should carefully watch the mouth and gums.

Many cases of the ecthymaform, the rupial, and the superficial serpiginous syphilides, are due to the invasion of microbes. In cases with much pustulation and encrustation the common antiseptic remedies are better, certainly for a time, than mercurial inunctions, which will prove beneficial for the resulting thickenings of the skin.

The initial nodule should be treated antiseptically, and covered with mercurial ointment or calomel. Mucous patches and condylomata should be cleansed and dusted with calomel.

Hypodermatic injections have many advantages and disadvantages, but are useful at certain times. The best preparation is an aqueous solution of the bichloride, $^1/_8$ to $^1/_2$ grain in 10 drops of water. Where rapidity of action is necessary, as in lesions on exposed parts, they may be used with care without causing trouble, even on delicate parts. The injections may be made very close to the eruptions. They may also be employed in certain rare cases, where mercury by the stomach acts as a depressant, and nutrition is much impaired. Here small but rapidly increasing doses should be used. Osseous, bursal, fascial and articular lesions are much benefited by injections combined with potassium iodide internally, but the efficacy of inunctions in these cases must not be forgotten. In conclusion, mercurial fumigations are of great value, and most useful in stubborn localized and even general eruptions, and particularly in the chronic, scaly stages of early and late eruptions, and also in almost all cases of pustular, ulcerative, and serpiginous syphilides. They must be used with caution, and the patient should be carefully watched during their use.

Severity of the French Courts with Reference to Pharmacists.

French pharmacists are much exercised over the severe sentence pronounced against one of their number, who had committed an error which occasioned the death of his client. The pharmacist was condemned to three months in prison, and was fined four thousand francs. In commenting on this sentence, the *Repertoire de Pharmacie* says: One is quite justified in expressing the most profound surprise, and even in accusing the magistrates of dispensing with their pristine impartiality, when they punish pharmacists so severely, and others, not less guilty, are treated with such marked indulgence. For instance, on August 1, a butcher was brought before the Tribunal de Bourges, accused of having furnished to a body of troops meat of a bad quality, which had poisoned 227 people, one of whom died, and it was established that the seller was aware of the quality of the meat, and yet the sentence imposed was simply a fine of 50 francs and imprisonment for fifteen days. The contrast between the two cases is striking; on the one hand, we see a butcher, impelled by cupidity, sell that which he knows to be bad, poisoning a great number of people and killing one; he is treated with unlimited consideration. But the poor pharmacist, who involuntarily commits a blunder, receives the heaviest punishmont the law allows.

A French Report of American Brown-Sequard Experiments.

The *Concours Medical* says: In America the Brown-Sequard method was not slow in being put to the test. A negro and two reporters were subjected to the treatment; all three are dead, and two other persons are liable to die. What could have been injected?

MEDICAL ITEMS.

Dr. Jacob Geiger will on January 1, 1890, retire from general practice and will in the future devote his entire time to surgery and consultations.

Alcoholic Indulgence.—A committee of the British Medical Association reports: 1. That habitual indulgence in alcoholic liquors beyond the most moderate amount has a distinct tendency to shorted life, the average shortening being roughly proportionate to the de-

gree of indulgence. 2. That of men who have passed the age of twenty-five, the strictly temperate, on the average, live at least ten years longer than those who become decidedly intemperate. From our personal observation of the amount of drinking indulged in in Great Britain, this state of facts will soon depopulate the country.

Diphtheria to an alarming extent prevails in Burlington, Iowa, and the country adjacent. There have been several deaths this week, and many children are down with the disease. Precautions are being taken to prevent the spread of the infection.

Dr. H. C. Coe, of New York, recently reported to the Section of Obstetrics of the New York Academy of Medicine a successful case of laparotomy and supra-vaginal amputation of the uterus for rupture—the first successful case of the kind, we believe, in the United States.

"Bisulphate of Morphine."—A lawsuit interesting to the members of the medical profession as well as to apothecaries is now before the courts in Montreal. A French Canadian practitioner, wishing to prescribe quinine for a young child, through absent-mindedness wrote upon his prescription *bisulphate of morphine* instead of *bisulphate of quinine.* The paper was taken to the shop of a well-known apothecary, whose assistant, perceiving an error, at once, after the manner of inexperienced dispensers, attempted a substitution, and made up the powders with sulphate of morphine. The result was fatal. And now a curiously complicated question had to be settled by the judges. The father of the child has sued the doctor because it was through his absent-mindedness that the child lost its life. The doctor has sued the apothecary for all the damages to which the father's suit may put him. It is true, he pleads, that he ordered bisulphate of morphine, and that, if such a substance existed and if the apothecary had sent it to the child, he would be responsible, but he never ordered *sulphate* of morphine, and it was the sulphate of morphine that killed the child. It will be interesting to know the result of the trials.—*N. Y. Med. Jour.*

SOCIETY PROCEEDINGS.

McDOWELL MEDICAL SOCIETY.

Twenty-ninth Semi Annual Meeting, held at Henderson, Ky. November 11, 1889.

Morning Session.

The Society was called to order at 10 A.M., by the President, Dr. John E. Pendleton, of Hartford, Ky.

Dr. Ap. Morgan Vance, of Louisville, read a paper on

Antiseptic Surgery.

He said the great progress of surgery in the past ten years has been just in proportion to the increased understanding and confidence in the power of antiseptic and aseptic methods of treatment. The day is not far distant when a man will be ashamed to admit the formation of pus in a wound of his making. He is now ashamed of such a result, as he knows it is by some neglect on his part that it is there. The technique, he said, is to be acquired by reading the medical journals of the day, and making trials of the methods there described.

Dr. Vance then by a series of dont's directed the attention of the members to the importance of the little things in this kind of work, reporting cases illustrative of the results to be obtained.

Don't fail, when possible, to have a general bath before doing a major operation.

Don't do any operation with suspicious hands; hot water, soap, nail brush, and pen knife should be carefully used by the principal and assistants before any operation. It is best to cut the nails very short so there will be no place for germs to lodge.

Don't just before or during an operation put your fingers about your nose, eyes, or ears, or use your handkerchief, or shake hands with any one. It is better even to offend a visitor than to run the risk of infection.

Don't pick up, or allow your assistant to touch, any instrument, sponge or suture that has fallen upon the floor during the operation.

Don't bite off the end of a suture that it may the more easily be threaded.

Don't put your knife, or other instrument, in your mouth or behind your ear, preparatory to its use.

Don't fail to detail some one to wipe your face during a long and laborious operation.

Don't cough or sneeze over the operative field; consequently the use of tobacco or the presence of a cuspidor should be forbidden in the operating room:

Don't fail, when possible, to have the patient bathed and clothing changed before an operation. When this is not possible thoroughly cleanse the field, and never make or dress a wound where the surrounding parts have not been shaved thoroughly.

Don't allow any visitor to handle the field of operation after the patient is prepared, unless he is aseptic.

Don't allow visitors who are doubtful, *i.e.*, who are attending patients with gangrene, erysipelas, or puerperal fever, etc., unless they have taken all precautions.

Don't fail to have the field surrounded by warm sublimate towels.

Discussed by Drs. G. Frank Lydston, of Chicago; A. M. Owen, of Evansville, Ind.; I. N. Love, of St. Louis; J. Y. Brown, of Henderson, Ky., and discussion closed by Dr. Vance.

Dr. I. N. Love made some remarks on the

Management of Fevers.

He said nearly all the cases of fever which come un

der our observation, after it is well established that they are continued fevers, no matter what the cause, the management of them rather than medication is what we wish to obtain, yet there are times when medication is an important part of the management. The latter should be secondary however. When called to a case of fever we find a high temperature, with a history invariably of chill. In malarial fevers we have a history of days of discomfort, headache, bad digestion, etc., with no well defined chill or rigor. In fever cases the first thing is to clear out the sewers of the patient, keeping open the secretory and excretory organs, by giving good doses of calomel along with compound jalap powder, followed by some saline purgative. Sometimes thorough cleansing of itself overcomes the fever, then proper measures should be taken to prevent its recurrence. The alimentary canal having been cleared out, management rather than medication should be employed.

The ice water given patients should be boiled and kept hermetically sealed in an ice chest; so too with the milk given fever patients. Cleansing the mouth and teeth are important factors. No patient with typhoid fever should have sordes on the teeth. An item of vital importance is tranquility of both mind and body. Friends should not be permitted to see fever patients. The physician should insist upon the patient using a bed pan, saving as little muscular effort as possible. With a view to producing this tranquility the administration of medicines which produce sleep is of great value. Sleep is one of the most curative agents in fevers. In controlling temperature the speaker highly recommends acetanilid. He has used it in a large number of cases with very satisfactory results. Given in doses of 2½ grains, every two to four hours, to an adult, it reduces temperature at least one and a half degrees, and keeps it down. The speaker gives it in the form of a solution with brandy or Tokay wine, which makes an ideal stimulant. He also alternates the sponge bath with the administration of acetanilid.

The hydro-therapeutic treatment of fevers had received considerable attention of late, and among the more interesting articles that have been written are those by Drs. Baruch, of New York, and G. C. Smythe, of Indiana.

Quinine, as an antiperiodic, should be ruled out; yet if there is a malarial element it was the remedy to determine it. Quinine disturbs the nervous system, demoralizes the alimentary canal, and impairs digestion and nutrition.

Dr. Love, in closing, favored the predigestion of all foods for fever patients for various and obvious reasons, which he gave at considerable length. Bovinine, which is simply an extract of maltine, is very satisfactory in such cases, as it is well received, well retained, and is unquestionably very nourishing.

Discussed by Drs. P. Thompson, of Henderson, Ky.; W. C. Cook, of Henderson, Ky., W. C. Smith, of Henderson, Ky.; G. Frank Lydston, of Chicago; A. M. Owen, of Evansville, Ind.; Bransford Lewis, of St. Louis, Mo., and discussion closed by Dr. Love.

Dr. J. E. Pendleton, Hartford, Ky., read a paper on

Trephining, With Reports of Cases.

He said trephining in itself is not a dangerous operation. There has not been a record of cases in which all other factors of danger have been eliminated. The operation is done for the relief of some injury or other pathological condition which either impairs the health or imperils the life of the patient.

Operations done for the relief of epilepsy are more nearly fair examples from which to calculate the mortality rate than any other class of cases that have been recorded. Even in these, if the epileptic seizures be due to old traumatisms of the skull with spiculæ of bone or exostoses impinging upon the brain or its membranes, they should be excluded. It has not been the speaker's fortune to be called to use the trephine for tumors or epilepsy. His experience with the instrument has been for the most part confined to recent traumatic injuries of the head. In two of the cases he had treated, exostosis of the inner table was found. He reported five cases upon which he had successfully operated, and four in which the indications for trephining were palpable.

He concluded by saying that much as had been learned and published within the last two decades with regard to the functions of the cerebral centers, we are not yet in possession of sufficient knowledge to shield us from the danger of making mistakes in locating cerebral lesions. The very complex anatomical arrangement of the nervous centers and their conducting tracts; the facts that two or more areas may be intimately connected with the same function, and that lesions of the same location in different individuals may not produce like definite results, conspire to hinder correct diagnosis. Tumors and abscesses embedded deeply in the brain substance that would inevitably have terminated life have been extirpated or evacuated and the patients restored to health. Perilous as may seem these daring ventures in brain surgery, the speaker said there will be found many, whose lives have been made so miserable by constantly recurring fits of epilepsy, and failed of relief in other directions, who will gladly avail themselves of almost any operation to get rid of their malady. In depressed fractures, in sub-dural or subcranial hæmorrhage, or in traumatic abscess, if the focal symptoms are of a reliable character, there should be no hesitation about operating.

Judging from his own observation and all the information he had gathered concerning the conditions of the skull and brain for which trephining may be done, he could only say that the propriety of operating depends mostly upon our ability to make a correct diagnosis.

Discussed by Drs. Vance, Owen, Lydston.

[TO BE CONTINUED.]

SOUTHERN SURGICAL AND GYNÆCOLOGICAL SOCIETY.

Dr. Virgil O. Hardon, of Atlanta, Ga., read a paper on

The Abortive Treatment of Acute Pelvic Inflammation.

He said: There has been much change of opinion on this subject. Acute pelvic inflammation is, in the majority of cases, associated with sepsis, gonorrhœa, or some form of inflammation of the tubes. Treatment on this basis has been very successful; it consists in the removal of the organs by laparotomy. He who rejects it carries conservatism to a fault and is not open to conviction. But it is not always possible to apply the treatment; certain circumstances preclude it. In other cases the magnitude of the procedure seems too great and the patient goes to some one who suggests milder means. The time of election for operating is not at the height of the inflammatory attack, but after it has abated, therefore the physician is often constrained to adopt soothing and palliative measures. But to allow the process to pursue its course exposes the patient to permanent disability through distortions, thickenings, etc., left by the inflammation; these jeopardize health, comfort and even life. Then if the operation be performed, the recognition of the organs in the removal is sometimes impossible. Hence the necessity for an abortive plan of treatment.

There are two forms of inflammation the results of pelvic disease, peritonitis and cellulitis. In many cases both are present together. It is hardly possible when one considers the anatomical relations of the peritoneum and cellular tissue, to conceive of inflammation of one without the other. But in the majority of cases one can be recognized as playing a preponderating part in the disease, although some authors strenuously insist that cellulitis is a myth. It may be demonstrated both by post-mortem examination and by the clinical history.

In the course of the disease, we recognize three stages: the stage of effusion, in which serum is poured out; the second, in which there is solidification, or the exudate is either absorbed or breaks down and is transformed into pus.

The first stage shows by vaginal examination a boggy feeling. The uterus is still movable, but moving it causes pain. Twenty-four hours later, the cellular tissue is hard and unyielding; and it is this unyielding part that afterwards breaks down into pus. Or, on the other hand, it undergoes cicatricial contraction, twists the pelvic organs and deforms them, deranges the circulation and nutrition, and impairs all their functions. There is pain in the thighs, tenderness, painful defecation and micturition.

The patient is not usually seen in the early part of the first stage. This is unfortunate, as it is only in this stage that the disease may be aborted. The treatment which I suggest and advocate, is that of puncturing in the early stage of effusion, the cellular structures, with a small aspirating needle, and drawing of this effused fluid. One or two drams may be withdrawn in this way without injury to any of the other organs. Pain is not severe and chloroform is not necessary. The patient almost invariably falls into a comfortable sleep soon afterwards. The pulse and temperature rapidly decline, the constitutional symptoms disappear, and in forty-eight hours she feels as well as before. No solidified inflammatory products remain to show the result of the former inflammation. The effect of the aspiration is simply to cut short the inflammation and does nothing towards removing the cause.

Some have said that the use of salts in this stage will accomplish the same thing; it may be of some assistance, but it does not prevent the deposit of lymph.

In pelvic peritonitis there is a greater amount of nausea. The finger in the vagina will detect thickening of the tissues. There is absence of the boggy feeling, which is so prominent a feature in cellulitis. This is the great point of distinction. There is a serous exudation from the peritoneum which gravitates into the pelvis. Lymph is thrown out, agglutinates and forms bands which can be detected by the finger. This results in matting the organs, impairing their function and deranging their circulation, etc.

To abort the disease is therefore of as much importance as it is in cellulitis. The adhesions which occur are due to the lymph between opposing surfaces. The removal of this is impossible; a restriction or limitation of the quantity thrown out is the only thing that can be done.

Taking a hint from Dr. Baldy, I have, during the past year, been treating all cases of acute pelvic peritonitis by active catharsis, giving tablespoonfuls of saturated solution of salts every hour until free catharsis is produced. After this, the pulse and temperature begin to decline, and relief is prompt and marked. I have a number of patients who are subject to recurrent attacks of this trouble, who have learned to abort such attacks without resorting to a physician. And no deposit is left in the pelvic cavity at such times. I could cite a large number of successes obtained by this plan.

Dr. Hunter McGuire read a paper on

The Treatment of Chronic Cystitis in Women.

After pointing out the vesical disorders in women, due to reflex troubles, such as piles, fissure, diseases and displacements of the uterus, foreign bodies, etc., he proceeded to the treatment of true chronic cystitis. First, he dilated the urethra and neck of the bladder, paralyzing, for the time, the sphincter; after this he introduced the drainage-tube, and gave the organ complete rest.

In closing the discussion on his paper, Dr. McGuire, at the request of the society, gave, in detail, the technique of his operation for the formation of an artificial urethra in enlarged prostate in the male.

After washing the bladder out, shaving and cleansing the parts about the pubes, the rectal bag is introduced

and filled with 10 or 12 ounces of water. In an emergency, a pig's bladder might be substituted for this bag —one to hold 12 ounces would be the proper size. If he could get nothing else, he would distend the rectum with sponges. This distension of the rectum is important; it pushes the bladder up out of the pelvis into the abdomen; it keeps the peritoneum out of the way; it pushes the bladder close to the anterior abdominal wall, and makes the operation very simple and safe. The patient's bladder is then filled with warm water, containing a small quantity of carbolic acid. It is not necessary or desirable to distend the bladder; indeed, if the distension is carried too far the bladder might burst.

After all is ready, he cuts for an inch and a half, just above the symphysis pubis, through the skin, fascia and fat. He takes great care to keep in the middle line, and makes his cut down to the symphysis; with the handle of the knife he separates the recti muscles, then cuts through the fascia transversalis; again with the handle he goes through some fat and loose cellular tissue, between the fascia and bladder. Carefully keep in the middle line, and disturb this structure as little as possible. The bladder is then in view; open it with the point of the knife, and, as the water flows out, introduce your finger and examine it; no stiches are necessary anywhere. When the rectal bag is removed, the bladder falls down into the pelvis, and when the parts have healed, and the opening into the bladder is reduced to about the size of the ordinary urethra, this new tube will bear the relation to the bladder that the spout of a coffee-pot does to the pot.

Then the man will be able to retain and expel his water. He can hold his water until it accumulates in the bladder to a point above the level of the top of the new urethra—for the recti muscles keep the canal closed when not in use, and prevent leaking, no matter what the position of his body. When he makes water, it comes out as from the natural urethra, the last of it in jets.

There is no need for drainage-tubes after the operation. Drainage is just as complete after this operation as it is after perineal section. It is difficult to believe this, but it will be seen after a trial, or after a careful study of the mechanism of micturition. It was after such a study that he devised the operation.

He had in his hospital, when he left, an interesting case of a woman, who, in consequence of sloughing after childbirth, had lost the whole of her urethra and a part of the neck of her bladder. The plan usually practiced in such cases was to close the labia and turn the urine into the rectum. He intended to make in this case an artificial urethra above the pubes, as he had done in the male, and close up the lower end of the bladder entirely. He was certain, in this case, that he would succeed in making the woman hold and expel the urine at will.

Dr. J. S. Stone, of Lincoln, Va., read a paper on

The Treatment of Contracted Bladder by Hot Water Dilatation.

During the past few years certain protracted cases of cystitis, occurring chiefly in women, have been observed by Dr. Stone, which have resisted all known forms of medical treatment and necessitated some surgical or mechanical measures of relief.

He describes the manner of dilatation as follows: "The patient is given morphine sulphate, gr. $\frac{1}{4}$, atropine sul , gr. $^1/_{200}$ hypodermically. She is placed on her back on a table for convenience, although it would answer to arrange the bed with the patient thereon to suit the operator. A soft catheter is at once inserted into the bladder, and, after the urine has escaped, hot water (temperature 110°) is thrown into the bladder until the patient will no longer bear it. This is allowed to escape and is measured, giving the full size of the bladder in its present condition. As the morphine gradually becomes absorbed, the patient will bear still further distention, each time perhaps one drachm may be added to the capacity of the bladder. I prefer using a rubber-ball syringe holding two to four ounces. The pressure of the hand is safer than that of the tube or funnel, or any instrumental gauge, as the patient generally is unable to resist the tendency to strain, owing to tenesmus produced by the expansion. As each *seance* should continue thirty to sixty minutes, the bladder may be filled and emptied many times, and at first the operator must be well satisfied if the gain is only one or two drachms in a bladder whose capacity is perhaps only two ounces. As the patient becomes fully under the influence of the morphine, the water may be increased in temperature to 120° or 125°F. The very best effect follows its use when it is at this temperature."

Discussion.

Dr. G. Frank Lydston.—With reference to the method of dilatation, as recommended by Dr. Stone, I would say that Dr. Stone or Dr. Skeyne (who was quoted as an authority) could hardly do damage with that treatment, but the general practitioner might carry it to an extreme. Hearing that chronic cystitis can be removed by hot water dilatation, the mechanical feature being the principal element to be depended upon, the general practitioner may conclude that the more the better, and do much harm. There is a physiological-anatomical reason for anxiety concerning the amount of dilatation practiced. The muscular fibers are absent or defective in some places, and, not properly supporting the mucous membrane at these points, the membrane might be stretched to an abnormal degree by a small amount of pressure.

With reference to the question of purely neurotic affections of the bladder, I remember I was jumped on in Chicago because I ventured to give a lecture on neuroses of the bladder. Neuralgia of the vesical neck is a condition frequently relieved by simple dilatation. Many women who have no organic trouble with the urinary apparatus, are affected by changes of the weather, etc., dependent on hypersensitiveness of the neck of the bladder.

With regard to medicaments for local use—I do not like iodoform and have a substitute for it in a solution composed of resublimed iodine, carbolic acid, menthol, eucalyptus, boroglyceride and tannate of glycerine. I have had excellent results with electricity, which conduces to absorption of the inflammatory material.

Dr. J. L. D. Davis.—I wish to indorse what Dr. Mc Guire said about the advantages of physiological rest. There is nothing more curative than this, obtained by free drainage. I have had more experience with males than females. I have always found that epicystic fistula to afford perfect satisfaction. The only trouble with it is that it tends to close before the pathological condition disappears. Dr. Stone said nothing about the amount of pressure he exercised in effecting the dilatation. I think there is much danger in that method on account of the liability to cause multiple rents on the inside of the bladder, which might lead to fatal hæmorrhage.

Dr. W. O. Roberts.—I would like to ask Dr. McGuire whether he has ever met with any cases of permanent incontinence resulting from the dilatation he speaks of? There are cases on record where this has followed dilatation for exploratory operations. Some, also, from the removal of stone in the bladder by that route. I agree with Dr. Davis in his preference for epicystotomy over the vaginal operation. I coincide with him also in his views of dilatation, or distended treatment. I believe it is dangerous.

Dr. A. V. L. Brokaw.—I have seen the happy effects of gradual dilatation, as employed by Dr. McGuire, and I wish he had laid more stress on the fact that the dilatation must be very gradual. It requires an anæsthetic, as a rule. I have tried to do it with cocaine, but failed, the effect not being very lasting. I have had most excellent success from the use of cocaine in the bladder, however, so its effects are not confined to the urethra. I was much disappointed concerning the practical use to which the cystoscope could be put. In epicystotomy or perineal section we have much better means of exploring the bladder.

Dr. McGuire.—In answer to a question, I will say that I have never seen incontinence result from dilatation of the urethra. I would be afraid to take out a stone 1 inch in diameter, through the urethra. I can make an incision through the vesico-vaginal septum so easily and safely that I prefer to do it in that way. I am no more afraid to dilate the female urethra in the way I have described than I am to dilate the sphincter ani. Of course, it could be carried too far. Agnew reported 6 deaths from rupture of the bladder; and it has been bursted over and over again through carelessness. Years ago I was always sorry to have a woman consult me for cystitis, but since using this method, I do not have any such fear, I have succeeded so well with it. I don't think Dr. Davis could get a good artificial urethra by epicystotomy in the female; but it is the best in the male. I have about a dozen old men going around now urinating through the belly, and doing well. For the cure of disease, physiological rest of the bladder is as important as it is in any other organ. It is on that principal that I suggest this treatment. Simple dilatation of the urethra carried far enough to produce temporary paralysis, will not drain the organ unless the woman is standing up; therefore, the little tube must be added and kept in place.

Dr. Stone.—I was well prepared to hear almost unanimous opposition to the method which I proposed. I have taken the pains, however, to consult the literature in the Surgeon General's office and I have been unable to find a single case of rupture of the bladder from any thing like this. Now it is unjust and dishonest for men not to report such cases if they have them.

I wrote my paper in September, and immediately after that I received a copy of the *Journal of Obstetrics*, in which Dr. Simms reported a case in which he had used dilatation of urethra for incontinence of urine; and the discussion which followed revealed the fact that several of the members had used this method. One of the gentlemen referred to the fact that a surgeon of Sweden continually practiced it. One of the cases I treated had been treated by one of the most eminent surgeons of America, without benefit, and he was cured by it. In time I think it will be established in practice.

Dr. John Brownrigg, Columbus Miss., read a paper on

Gun-Shot Fractures of the Femur.

He did not review the authorities nor the treatment by the leading surgeons, as it would be out of place before such a body, and so he confined himself simply to the improvements that had been made in the treatment of such fractures. He did not think that there was sufficient counter extension afforded by the appliances during the war. Hence the shortening of ¼ to 8 inches, with an average of 2.31 inches. He does not accept the opinion that it is wrong to apply more than 5 to 10 pounds weight extension, an opinion held by high authority. If a hiatus be left, and there is loss of a portion of the bone, the union will not be secure. He has often observed bone and flesh growing together in a wound, and in such cases the bone grows faster than the flesh, and he has seen a hiatus of 4 inches, where bone and periosteum were both shot away, filled up by growth of bone from both fractured ends until the ends met. Sufficient extension, he believes, in these cases, would prevent shortening. And this necessitates sufficient counter-extension. He accomplishes this with a jacket of cotton cloth to fit the chest, with a band sewed to its lower margin buckled securely below the ribs. This jacket presses on about 500 square inches of tough skin, and embraces in it the bony framework of the chest. The perineal band presses on a few inches of tender skin. A small air pillow is placed under the knees, and narraw co-aptation splints are fastened together at equal distances with tapes tacked on the outside of the splints. These splints are secured to strips

of cloth tied around them, and their edges are cut out when near the wound, so as not to press on it. By inflating the air pillow a little more, and placing a rubber cloth under the thigh to drain the water into the tub on the floor, and taking off all the strips of cloth except those at the ends of the splints, the wounds can be washed and dressed without disturbing the coaptation of the fragment.

The author had used this jacket in 13 cases of gunshot fracture of the femur. A section mattress is not required, as the patient can draw up his knee and support himself on his foot and elbows so that the bed pan can be placed under him without disturbing the broken bone or relaxing the extension, counter-extension, or coaptation. He adopts Gordon Buck's extension as the best in use. Great stress is laid on the small cost at which this apparatus could be gotten up, $1.80 covering the whole.

SELECTIONS.

EPIDEMIC CATARRH.

Dispatches from Europe indicate the rapid spread of epidemic catarrh over the entire continent, and the extension of the disease to North America is only a matter of time. Influenza of the type usually observed in periods of pandemics is far from being a trivial affection, a heavy mortality among the young and aged having been noted in many outbreaks. Like almost all known pandemics, this disease travels from east to west, so that its first appearance in the United States will be noted along the Atlantic seaboard. In many instances, dogs, cats, and horses have been attacked at the same time as man; this was a most marked feature in England in 1775.

The history of epidemic catarrh dates back only to the 13th century, although it is true that Hippocrates, in the third section of his *Aphorisms*, describes the affection in its simpler form. In the *Chronique des Freres Mineurs* may be found a narration of the outbreak of August, 1239; it prevailed in France again in 1311; it was an epidemic in Italy in 1323. In 1482 the disease was manifest throughout Europe, as it was again in 1557; in these pandemics all classes of people, the young and the old, the rich and the poor were alike victims to the malady. In most of the olden outbreaks the affection commenced with a chill, pain in the head, and a tendency to stupor, followed by a dry cough and pain in the chest, with difficulty in breathing; the patients, when convalescing, felt an almost complete restoration about the 14th day. In 1675 the whole of Europe was attacked by influenza; the type of the disease during this outbreak was violent, the cough being so severe as to produce bloody expectoration, the cases verging on the pneumonic order. From 1729 to 1735 epidemic catarrh traversed the globe, commencing in Germany, passing to England, France, Switzerland, Italy, Spain, Mexico, Peru, and throughout North America, especially in New England. In 1775 one of the most remarkable epidemics of influenza ever noted occurred in Europe and America. Warren, of Boston, and Benjamin Rush, of Philadelphia were the American epidemiologists of that period, the former, who was killed at Bunker Hill, being the historian of the earlier, the latter of the outbreak observed in 1790.

In 1800, and again in 1830, epidemics of catarrh spread from Russia all over continental Europe, and from thence to Great Britain and North America, prevailing, too, as far as Java and Singapore, and in the United States as far south as Burke county, Georgia. Epidemics of influenza have been noted since that time in 1847, 1860, and 1870, while the present outbreak, which will probably be remembered in this country as that of 1890, bids fair to outrival all previous manifestations of the disease, if the rapid spread and severe type observed at present in Europe is to be taken as an index. The average duration of an epidemic outbreak of catarrh, when localized, in 50 days. Those persons exposed to outdoor atmospheric influences are most liable to attacks, while the malady is most fatal to the weak-lunged in adult life of the community. Strange as it may appear, the very young and the very old have a seeming exemption from the affection, children under the ape of 8 years being rarely attacked, according to Warren, while among the aged the attacks are rare; those afflicted usually die. In 1847 250,000 people in London alone were attacked by influenza, and the mortality was frightful, according to Anstie; the average mortality of childhood being raised 83%, that of adults to 104%, while that of the aged was raised to the startling figure of 257%.

Influenza is the most rapid in its spread of any known so called zymotic disease, and its propagation is directly dependent on atmospheric influences.

Epidemic catarrh, which is probably a better name for the malady than influenza, usually commences by a chill, sneezing, dryness of the nares, with fever and inflammation extending to the frontal sinus; pains in the limbs, accompanied by a general feeling of lassitude, and headaches, followed by an ordinary attack of bronchitis. The treatment will vary, following the nature and gravity of the symptoms, and the rational empiricism of the period will offer us a multitude of new specifics, as is usual in epidemics of 60 days' duraiion.

The Pathogeny Of Hæmorrhiodal Disease.—In course of a paper on hæmorrhoidal disease Dr. Bodenhamer (*New York Medical Journal*, January 12, 1889) says that the chief predisposing cause of hæmorrhoids in the human subject, according to some authorities, is an anatomical one; and, in order to fully estimate the importance of the subject, this cause must be explained anatomically, which is the more necessary inasmuch as just the reverse of it obtains in quadrupeds; and in the explanation regarding the large vascular sup-

ply to the rectum, it will be perceived that hydraulics plays the most important part.

Anatomists know that in the inferior portion of the rectum in the human subject a large nunber of hæmorrhoidal veins exist; these veins are comparatively of large size; they occupy a peculiar depending position; and they receive but little support from the loose cellular tissue which surrounds them. Together with the foregoing facts we must consider the entire absence of valves in the depending plexus of the vena portæ. These several conditions of the veins of this part consequently tend to a retarded or sluggish circulation, the blood being more or less detained in them and favoring stasis. Whenever the body is erect, the blond therefore accumulates in these veins, so that under the most favorable circumstances they are subjected to more strain and pressure than any others of the body, and,in consequence of the want of valves in the portal system, the whole weight of the column of blood in them reaches from the liver or the heart without any interruption downward. These several circumstances act no inconsiderable part in the pathogeny of hæmorrhoids. They necessarily give rise either to hæmorrhage, vascular turgescence, hyperæmia, congestion, or hæmorrhoidal tumors. Indeed, any mechanism whatever which opposes the free circulation of the blood in that hybrid blood-vessel of the liver, the *vena portæ*, may prove a predisposing or an efficient cause of the hæmorrhoidal disease. According to authority, therefore, the depending situation of the veins of the portal system must always be a predisposing cause of hæmorrhoids in man so long as he maintains the erect posture. The absence of this cause in quadrupeds because of the horizontal position of their bodies is not, in the opinion of the writer, sufficient alone to prove that they are on this account entirely exempt from hæmorrhoids, as some, authors maintain; but this case may be a real one, so far as it goes, and have some bearing on the fact that animals are not subject to hæmorrhoids.—*Med. Rec.*

The Pathology of Death by Electricity.—At the meeting of the Medico-Legal Society held November 20, Dr. Phillip E. Donelin, Deputy Coroner, who read a paper on "The Pathology of Death by Electricity," exhibited the larynx of the lineman Feeks, whose tragic death on a telegraph pole excited so much attention a short time ago. It presented striking evidences of the injuries received from the fatal wire. In the course of the paper he said; "the popular idea that the electrical current passes along the nerves and produces shocks, by conducting the current to the brain, is, as you know, fallacious. Our knowledge of the great electrical conductive power of water, and the experiments of Dr. Richardson, which show the still greater electrical conductive power of blood, would lead one to suppose—and, in fact, it is proved by the greater damage done to the most vascular organs of the body—that the blood is the great conductor of electricity; and that in all cases of exposure to the electric current the blood is the first to suffer, and the nerve centres and cells the last.

"Unquestionably our knowledge of the manner of death points out clearly that when death is not on the moment produced by the shock of the current it must be produced by the electric current's action (conducted by the blood) upon the ganglia of the heart,causing spasm of the heart muscle, emptying the ventricles and abnormally forcibly propelling the charged and fluid blood to the periphery; producing hyperæmic ecchymosis in the most vascular portions of the most vascular organs. When death is not instantaneous it must be produced by disorganization of the blood: interference with the circulation causing engorgement of some vital vascular organ. The lungs being the most vascular, death usually results from asphyxia either through the unoxygenated condition of the blood or hyperæmia of these organs."

In reply to a question as to the effects likely to be produced by the infliction of the death penalty by electricity, Dr.Donelin said that the immensity of the power of the machines constructed was such that the purely mechanical results would occasion death. It was possible with those appliances to drive the current of electricity through the tissues with such power as to destroy them, though the amount of power to be employed was clearly within the control of the electrician.—*Boston Med. and Surg. Jour.*

Anecdotes of Ricord are the order of the day since his recent death. "Simplissime" contributes a number to *L'Union Medicale*, one of which is particularly interesting although it sounds a good deal like a fish story. Just before war was declared against Germany in 1870, a consultation of physicians was held over the condition of the French Emperor. Ricord and Nelaton were among the surgeons present. the great question to be decided was whether the Emperor had a stone in the blader or not. Ricord had hardly introduced the sound when he withdrew it and said there was not the shadow of a doubt but that there was a stone there. Rayer, who presided over the consultation, asked Nelaton what he thought. "I have not found any stone," replied the celebrated surgeon. Ricord, much astonished proposed to repeat the examination, and offered to make the click of the sound against the stone audible to those present. But Rayer interposed. "It is useless," said he; "these explorations fatigue the Emperor, and if Nelaton has not found the stone there is not one there." As a matter of fact Nelaton knew as well as Ricord that there was a stone in the Emperor's bladder, but it had been arranged with those, or rather as "Simplissime" says, with her who was anxious to have the war, that the stone ought not to be there so that there should be no necessity for performing an operation which would delay the Emperor in taking the field. This "she" alluded to was of course the Empress, upon whose shoulders is laid the responsibility for the disastrous

war. Had the French been successful it is doubtful if they would have been as ready to give the Empress credit as they are now to lay the blame upon her. Sir Henry Thompson afterwards found and removed the stone, and great ridicule was cast upon the eminent French surgeons who had not found a stone as large as an egg. The story is told to show that although Ricord possessed in the highest degree diagnostic accuracy he had none of what the French call "diagnostic diplomacy," which to judge from this case and that of the late Emperor of Germany is an essential quality in those who would practise medicine near the throne.—*Northwestern Lancet.*

A "Mutual Autopsy Society."—The death of General Faidherbe, who was one of its members, has brought this curious society somewhat prominently into the light. Its existence is not a thing very generally known, al though its origin is by no means of quite recent date. According to M. Laborde, the vice-president, who has recently been explaining the objects of the Society to the public, it was founded because up to the time of its foundation the opportunities of making post-mortem examinations were almost entirely confined to hospital physicians, and even they made the examination on subjects about whose previous history, outside their medical one, very little or nothing was known. But, there being an intimate relation between the structure of the brain and its functions, the members of the "Mutual Autopsy Society" hold that very little real scientific progress will be made until it is possible to study the brains of persons previously known either by their deeds or by their works. The members therefore formed themselves into this Society, which addresses itself to everyone having the interests of humanity and science at heart, as well as to those who, having been useful during life, have the laudable ambition to be useful after death. Enrolled as members are several ladies; and amongst the remarkable men whose brains have been examined by the society are Gambetta and Broca. The third convolution in the great orator's brain was anticipated to be well developed, and, as a fact, it was found post-mortem that this convolution so intimately associated with speech was much more developed than is generally the case, even in intelligent men.—*Lancet.*

The Effect of Hysterectomy on the Ovaries.—This question is of high interest now that the appendages are so often removed, whilst, on the other hand the ut erus is frequently extirpated. Professor Gram, matikati resently experimented on rabbits to gain knowl edge which might throw light on three questions. First, what changes in the ovaries follow total extirpation of the uterus? Secondly, when one uterine cornu is removed, what alterations take place in the corresponding ovary? Thirdly, does it make any difference in the second case, if the cornu alone be removed or the corresponding Fallopian tube cut away with it? He found that when the uterus was removed and the ovaries left intact, the latter continued to discharge their functions. If the subject were killed long after the operation the follicles were found in every stage of development together with recent corpora lutea. The removal of one cornu, whether with or without its tube, had no influence on the functions of the ovary. These researches were confirmed by the examination of the ovaries of a woman who died three years after total extirpation of the uterus. These organs showed no trace of atrophy, and follicles and corpora lutea were detected in every stage of development. Professor Grammatikati's paper appeared in the *Centralblatt fur Ggnakologie*, No. 7, 1889. His conclusions tend to induce operators to remove the ovaries whenever hysterectomy is performed, so as to spare the patient from ill effects produced by the persistence of active but useless ovaries. —*Brit. Med. Jour.*

Chronic Constipation a Cause of Pernicious Vomiting of Pregnancy.—Dr. Wiesel describes a case of pernicious vomiting of pregnancy in which the usual treatment not only failed to relieve, but actually aggravated the patient's sufferings to such a degree that she begged her attendant to procure a miscarrage. It was finaley decided to employ rectal injections of milk. Two decilitres of warm cow's milk were injected per anum, and after ten minutes the patient was ordered to drink a half-cupful of hot milk. The enema was expelled after an interval, but without any admixture of fæces. The quantity of milk injected was therefore increased to eight decilitres, with eight grammes of salt added thereto. After eight hours a fluid stool of most foul order was expelled. Another such injection brought out hard scybalæ, and these were followed by a copious natural stool. For the first time in a long while she enjoyed a natural sleep without nausea or vomiting, and in the morning she enjoyed her warm drink of milk with the yolk of eggs. Her bowels remained regular for three weeks, when the constipation recurred, and the nausea and vomiting returned. The same treatment was adopted as in the first instance, and again was successful. This case should lead physicians to give more attention to the state of the bowels in their pregnant patients.—*Wien Med. Presse.*

The Cure of Roaring in Horses.—It is not long since the operation of laryngotomy was anounced as an infallible cure of roaring in horses, and there can be no doubt that a good many roarers were very decidedly benefited by the operation, which consisted of an incision through the cricothyroid membrane and cricoid cartilage, and the removal, if we understood the directions aright, of the left vocal cord and arytenoid cartilage. It now appears, however, from a case recorded by Professor Walley, that this operation may completely

fail. A horse was purchased at Tattersall's in the early part of last summer; he proved to be a roarer, and his respiration became so much embarrassed that tracheotomy was performed. Two months later the animal died suddenly whilst the cannula was being cleaned, and on *post-mortem* examination it was discovered that an operation had been performed at some previous time and that the left arytenoid cartilage had been removed. It is said that the operation has already been discontinued in the army upon instructions from headquarters, and it is highly probable that we shall hear very little more of this method of curing roaring in horses—*Brit. Med. Jour.*

The Thymus in Cases of Sudden Death in the Water.—"Dr. Nordmann, of Basle, decribes a case of sudden death while bathing of a healthy young soldier, who, though a good swimmer, was seized with suden. rigidity and dyspnœa, sinking at once to the bottom. All attempts at restoration to life were fruitless. At the post-mortem examination nothing noteworthy was found except an enlarged and hyperplastic thymus. Dr. Nordmann has since collected three other cases recorded by von Recklinghausen of sudden death in the water, and in all of them an enlarged and pathological thymus was found. Why an enlarged thymus which had given rise to no symptoms during life should suddenly cause death under the circumstances in question is not at all clear, but Dr. Nordmann suggests that it is possible that an acute swelling occurs in the gland, due to the collection of a large quantity of secretion in the follicles of the gland, similar to the condition observed by Friedleben during the process of digestion and assimilation."—*Lancet.*

Tape-Worm in Children.—The following prescriptions will, according to the *Lyon Medical*, be found most effectual in cases of tape-worm occurring in children. Both are very agreeable to the taste, and are, therefore, easily administered:

I.

℞	Oleoresin of aspidium,	ʒj to ʒijss.
	Peppermint water,	f ℥ ss.
	Essence of anise,	gtt. x.
	Chamomile water,	f ʒ j.
	Syrup of sugar,	f ʒ v.
	Syrup of bitter orange-rind,	f ʒ v.

II.

℞	Oleoresin of aspidium,	ʒ j.
	Calomel,	6 gr.
	Sugar,	ʒ ij.
	Gelatin,	q.s.

Make into consistency of jelly, and administer as a confection.—*Archives of Pediatrics.*

Statistics of Leprosy in the United States.—In view of the general impression that leprosy is spreading in this country, it is desirable, in the interest of the public health, to obtain accurate information upon this point. The undersigned is engaged in collecting statistics of all cases of leprosy in the United States, and he would ask members of the profession to aid in this work by sending a report of any case or cases under their observation, or coming under their observation, or coming within their knowledge.

Please give location, age, sex, and nationality of the patient, and the form of the disease—tubercular or anæsthetic; also any facts bearing upon the question of contagion and heredity. Address,

Dr. Prince A. Morrow,
Journal of Cutaneous and Genito-Urinary Diseases.
66 West 40th Street, New York.

The Most Probable Period of Conception.—Schneider (*Memorabilien*) thinks the most probable time of conception is for four days preceding the menstrual flow and the eight days following, twelve days in all. In support of this he instances the Mosaic law, which forbids intercourse for fourteen days after menstruation. The Jews were very prolific, and Schneider believes the most fruitful intercourse is before menstruation, when coition favors the rupture of the ovisac; after menstruation he believes coition is less often followed by conception. Of course, during the four days previous to the flow the spermatozoa would retain their vitality in the genital passages of the female, and thus be ready to fecundate the ovum when it entered the uterus.—*Canada Lancet.*

On Reduction of Nitrates Through Cholera Bacteria.—Dr. Petri has made a series of experiments which yielded the following results:

1. Cholera bacteria reduce in their growth nitrates to nitrites.

2 The usual culture media, especially gelatine, and often also common cooking salt contain not inconsiderble traces of nitrate.

3. The red cholera reaction is accomplished through the medium of these impurities, *i. e.*, through the reduction of the nitrates.

4. An oxidation of decomposed ammonia through the vital action of the cholera bacteria is not yet proven and is improbable, in view of the fact first mentioned.—*Jour. Am. Med. Ass'n.*

A Case of Cæsarean section was down on the bills at one of our city clinics the other day, but the child would not wait, and came into the world by the usual route before the clinic day arrived.—*Times and Register.*

ORIGINAL ARTICLES.

TWENTY CONSECUTIVE CASES OF ABDOMINAL SECTION.[1]

BY L. S. M'MURTRY, M.D., OF DANVILLE, KY.

Ex-President of the Kentucky State Medical Society. Fellow of the Obstetrical Society of Edinburgh, etc.

This series of cases comprises the first 20 abdominal sections performed by myself, and illustrates a variety of pathological conditions and diverse complications. All the cases were in private practice, and with two exceptions all the operations were done at the homes of the patients. Two cases were treated as private patients in a well appointed hospital. In every case operative treatment was only accepted after all ordinary and so-called conservative measures had been exhausted, and in several cases the operation was only accepted when the patient's condition was regarded as hopelessby physician and family. In no case, however desperate or complicated, has operation been refused. From the table it will be seen that in the 20 cases there were three deaths. I report these cases in a group at this time as illustrating almost every character of abdominal operation, and with a view of furnishing a basis for the discussion of this important class of gynæcological and surgical cases.

The difficulties attending the diagnosis of intra abdominal disease have been well illustrated. Case No. 1 was diagnosed by four different surgeons before I saw the patient, as ovarian cyst. The history and physical signs were characteristic of that condition. On opening the abdomen it was found to be encysted dropsy, the result of tubercular peritonitis. Evacuation and irrigation were followed by quick recovery, and though the peritoneum was studded everywhere with miliary tubercles, the patient, æt. 68 years, remains to-day in vigorous health aud activity. Encysted dropsy of the peritoneum cannot be differentiated in certain instances from ovarian cyst.

The case of soft uterine myoma (case No. 15), was also believed to be an ovarian cyst. The tumor was very soft—it was besides heavily œdematous, and fluctuated distinctly. The history and general condition of the patient tallied with the deceptive diagnosis. It was only when the abdomen was opened that I realized that I was to do a supra-vaginal hysterectomy instead of an ovariotomy. This lady was fast failing from pressure on adjacent organs, the mass after removal weighing 21 pounds. She made a complete recovery and is now in good health.

Besides demonstrating the great difficulty of diagnosis this series also demonstrates an immense variety of com-

No.	Age.	Pathological Condition.	Adhesions.	Drainage.	Result.	Remarks.
1	32	Ovarian Cyst.	Slight.	No	*	
2	29	Ovarian Cyst.	Extensive.		*	Very large tumor; omental and intestinal.
3	27	Ovarian Cyst.	Extensive.	No	*	
4	31	Ovarian Cyst.	Dense and Extensive.	No	*	
5	29	Cirrhotic Ovaries and Chronic Salpingitis.	Dense.	Yes	*	Ovaries and tubes removed; patient had been an invalid for years. Complete cure.
6	17	Cancer of Intestines.		No	*	Operation purely exploratory; caput coli and ileum a cancerous mass; patient died soon after from the disease.
7	65	Tubercular Peritonitis; Encysted Dropsy.		No	*	Patient in good health, 3 years after operation.
8	35	Suppurating hæmatocele, peritonitis.		Yes	*	
9	35	Pyosalpinx and General Purulent Peritonitis.		Yes	*	Appendages removed, drainage tube kept in 28 years; complete recovery.
10	31	Typhlitis, Perforative Peritonitis.		Yes	*	Double perforation of cecum; purulent peritonitis; first case of non-traumatic perforation on record saved by laparotomy.
11	34	Extra-Uterine Pregnancy.		Yes	†	Large fetus, past viable period, dead and decomposing; septic symptoms preceded operation. Death from from hemorrhage.
12	28	Tubercular Peritonitis.		Yes	*	Patient died afterward with pulmonary lesions.
13	31	Large Ovarian Cyst; Pyosalpinx on opposite side.	Universal and Dense.	Tubes 2	*	Patient *in extremis* at time of operation from peritonitis; irrigation of peritoneum for 10 days. Complete cure.
14	27	Cirrhotic Ovaries.	Dense.	No	*	Ovaries and tubes removed; patient invalid for 6 years prior to operation; convulsions; opium habit; marked improvement.
15	29	Uterine Myoma; soft and œdematous.	Extensive.	No	*	Supra-vaginal hysterectomy; mass weighed 21 lbs.; œdematous; severe pressure symptoms; extra-peritoneal pedicle; prompt and complete recovery.
16	39	Double Ovarian Cyst.	Dense.	Yes	†	
17	36	Ovarian Cyst.	Dense.	Yes	*	Had been tapped with trocar 4 times; very large cyst, weighed 42 lbs.
18	40	Ovarian Abscess and Pyosalpinx.	Dense.	Yes	†	Patient *in extremis*, emaciated, night-sweats; pigmented skin; very large abscess cavity; death 10 days after operation.
19	29	Extra-Uterine Pregnancy.		Yes	*	Ruptured tube; pelvis filled with blood-clot. Complete recovery.
20	36	Cystic Ovaries; Chronic Salpingitis.	Firm.	No	*	Appendages removed. Cure.

* Recovery. † Death.

[1]An Abstract of a paper read before the Southern Surgical and Gynecological Society, Nov. 13, 1889, at Nashville, Tennessee.

plications, no two being alike in this respect. As a rule prolonged and repeated attacks of peritonitis had preceded operation, hence adhesions and hæmorrhage were most formidable and trying complications. I have made it a rule to have at hand when operating, every preparation for every emergency, from hysterectomy to suture of intestine.

It will be observed that 7 of the 20 cases here reported were ovariotomies. The cysts were in every instance large, and had, with two exceptions, been tapped several times. One was a suppurating cyst. The only death I have to record, which I feel to have been avoidable is case No. 16, an ovarian cyst. Her condition was extreme, the operation difficult and complicated, and I think through the water furnished me septic peritonitis resulted. Since that time I have in every possible instance used distilled water, shipping it to distant points where I was going to operate. I mention this particularly here as I believe my only avoidable death was from impure water poured into the abdomen. The vessels in which the water was heated were not clean. The ovariotomies, with this exception, resulted in recovery. All were complicated and some were extreme. This is the most successful capital operation in surgery. It may chance to be one of the simplest; and it may prove one of the most difficult.

The operations upon the uterine appendages are among the most difficult in the whole field of pelvic surgery. To remove pus tubes and adherent ovaries, buried in a mass of adhesions, and friable from cheesy degeneration and suppuration, is among the most difficult operations in surgery. Normal relations are destroyed by the exudation; the fingers must make a track to the floor of the pelvis, and blood and pus rise up as the exploration and enucleation proceed. Thorough work, irrigation and drainage all conjoined, give the only basis of success in these cases.

As my observation and experience have grown, I have striven to operate with increased expedition. Prolonged anæsthesia and exposure of the patient's body-surface are the prime factors in surgical shock. Recognizing the fact that the worst results in abdominal surgery come from incomplete and unfinished operations, I have in all cases nerved up to doing the work thoroughly and completely. Whatever measure of success I have attained, and can be claimed for a limited number of abdominal operations, I attribute to close and unremitting attention to details. In the preparation of the patient and the patient's surrounding, I have allowed nothing to be overlooked and no trouble or pains to be shirked. In the preparation of sponges, cleaning of instruments and preparations for operation, I give to all minutiæ my personal attention. I have more and more simplified my technique, using fewer instruments and relying more and more upon my fingers. I have more frequently used the drainage-tube. In the only case in which I have been compelled to reopen the abdomen after the incision had healed, the second operation was due to my failure to put in a tube at the first operation. The views upon this essential feature of the operative technique so ably and persistently urged upon the profession and so successfully demonstrated in practice by Dr. Joseph Price, of Philadelphia, have done unestimable service in improving results. Irrigation by means of the gravity-tube I use in every instance where fluids, *debris* and clots are to be removed. The cleaning is more thorough as well as more rapid, than prolonged sponging. To fill the abdomen and pelvis with hot water, moreover, lessens shock. The water is poured into a funnel held above the table, while a rubber tube leads it through a proper nozzle which the operator's hand directs into every nook and cranny of the deep pelvis and abdomen.

The after treatment in my cases has been exceedingly simple. During the first 48 hours only sips of hot water are given. On the third day the bowels are moved with a Seidlitz powder or sulphate of magnesia. Broths and semi solid food are then given in small and increasing quantities. When thirst is great, an enema of half a pint of water gives relief. Opium is studiously and persistently avoided.

In a number of my cases I have operated in the midst of active peritonitis, with vomiting and tympanites. In this condition of affairs I have witnessed the most gratifying results from repeated small doses of calomel, dropping 2 or 3 grains on the tongue every hour until the bowels are freely moved.

Increasing experience has impressed me more and more with the difficulties of abdominal work, and makes me less confident of often meeting with simple cases. In conclusion I desire to make an earnest plea for earlier interference in abdominal diseases. What Bantock has done in England by his little work entitled "A plea for Early Ovariotomy," we need to do in our own country. When operations are done in good time, before emaciation and exhaustion come on, and before repeated attacks of peritonitis have complicated comparatively easy tasks for the surgeon, then will our results excel even the briliant record of the present time.

THE MECHANICAL DIVISION OF CASEIN IN BOTTLE-FED INFANTS.

BY FRANK A. MORRISON, M.D., INDIANAPOLIS, IND.

The problem of infant feeding, to the majority of physicians, presents some of the greatest difficulties found in practice.

Great as this is in a state of health or when an infant, fairly nourished, is, from any cause, suddenly deprived of the breast, it becomes still greater when digestive irritation or perhaps inflammation has set in.

During the last summer the writer had the usual number of annoying cases of indigestion with and without intestinal inflammation, and was many times put to his wit's end for something in the way of easily digested food.

Reflection convinced me that if by some means I could mechanically separate the tough coagulum formed by the addition of the gastric juice of the child's stomach from the ingested milk, a step in advance would be taken. Of course such division must be undertaken previous to feeding. After some experimenting I conceived the following plan, which I have put into good use many times.

About two grains of good scale pepsin are dissolved in a dessertspoonful of lukewarm water, and then added to about four ounces of warm milk.

In the course of a few minutes coagulation of the caseine follows. The clotted milk is now put in a cheese cloth bag, and the bag lightly squeezed in the hand.

If the stomach is very irritable and the digestive power exceedingly bad, at first slight force is used. By this means we get, practically, whey, but with a stronger digestion more and more force is applied until almost all the caseine is forced through the meshes in rather fine particles. These are shaken up well in the fluid portions and given small quantities at a time by means of an ordinary nursing bottle. My experience has been that caseine thus broken up does not again become blended, but exists as a flucculent rather than a tough mass, resembling in this respect human milk.

Milk thus prepared is given, subject to the same rules governing its use, in ordinary cases.

It is not pretended that this is the best way of administering food to bottle-fed infants suffering from indigestion or entero-colititis, but only one way. When the reader, like the writer, has tried infant food after infant food, and sees the patient steadily growing worse, he will, I am sure, grasp at any rational, especially if it be simple, means of treatment.

107 N. Alabama Street.

REPORT ON PROGRESS.

DISEASES OF THE NERVOUS SYSTEM.

BY FRANK R. FRY, A.M., M.D. ST. LOUIS.

The Therapeutic Value of Electricity.

The New York correspondent of the *Journal of the American Med. Ass'n.*, in his latest letter to said journal (Dec. 14, 1889), gives a brief account of the discussion of the above topic in the New York Academy of Medicine:

"It will perhaps be remembered that last spring Dr. M. Allen Starr, Clinical Professor of Diseases of the Mind and Nervous System at the College of Physicians and Surgeons, read a paper before the New York Academy of Medicine on 'The Therapeutic Value of Electricity,' the tendency of which was decidedly to undermine the confidence of the profession in this agent."

The Review noticed at some length this paper of Dr. Starr's at the time of its publication. Without referring to the copy of The Review to see exactly what we said on that occasion, we remember to have expressed some surprise, not that Dr. Starr had reached the conclusions that he did, so much as that he announced that he was disappointed in the use of electricity as a therapeutic agent, at least as a scientific therapeutic agent. Dr. Starr's conclusions, as given in the above mentioned paper, were the result of some six years' (if we remember right) experience with this agent, carefully and scientifically (as possible) applied in a considerable range of clinical cases, with a view to estimate in some tangible or definite and reliable manner the actual therapeutic effects, and to collect the same into statistical form. We think we have not overstated Dr. Starr's intention or at least his desires in this matter, as expressed, or to be inferred from his paper.

We suppose that every practical physician who has started out to thoroughly and honestly test the therapeutic value of electricity, has wished that there were some data of the kind that Dr. Starr would like to have furnished. But there are none of this kind, and the reason that we are surprised at Dr. Starr is that he should not have more thoroughly realized that, with our present knowledge of this agent on the one hand, and of pathology on the other, it is impossible to gain statistics in this matter of any great value. On the other hand his opponents, not only in the New York Academy of Medicine, but everywhere, claim that their data are of the most reliable kind, at least they furnish them as though they believed they were. We claim that they are simply the individual observations of an empiric use of this remedy, and it is right here that many fail to note a distinction that would enable them to better understand the gist of this question. Many who do not deny the possible therapeutic value of electricity will not admit that there are sufficient reliable data to warrant the profession in using it with the same confidence that it employs many other empirical remedies. To those who claim so wide a range of usefulness for the several forms of electricity they do not say "you are mistaken," but they demand, "furnish us some better evidence."

It is in response to such a demand that some of the New York Academy are going to be heard on this subject. We fail to see that they strengthen what has been known to have been their position for some time. We quote from the above mentioned correspondent's letter, confident, from the nature of the subject, that he fairly presents the points that were offered:

"On this occasion Dr. A. D. Rockwell, the well-known expert, read a paper on 'The General Therapeutic Action of Electricity.' At the outset he said that notwithstanding all that had been written upon electrical treatment, there existed so little correct appreciation of the physics of this agent that it became necessary to emphasize again and again the statement that electricity is not a simple, single manifestation of natural force, but a generic term including complex phenomena and a great variety of manifestations. Much, indeed, was claimed for it; but it accomplished much

and produced effects widely divergent, so that it was often of service in more or less opposite conditions. Later he expressed himself in the following very plain language: 'When its therapeutic efficiency is denied, the inevitable conclusion at which those must arrive who have time and time again witnessed evidences of its power is that he who fails in his results is deficient in his experience, is not sufficiently persistent, or has somehow failed in the technique of his applications.'

"Electricity, he said, was not only a stimulant of the most powerful character, but it was also a sedative which in certain cases was unexcelled. Furthermore, it was a tonic of a very high order, and to produce the tension of the nervous system and of the muscular fibers generally which would enable them to respond to their natural stimuli, the mechanical effects of the faradic current seemed to be especially applicable. Properly applied, it would not produce any appreciable muscular contractions, and yet it gave passive exercise to all the deeper lying as well as superficial muscles. Aside from its purely mechanical effects, it was evident that even this current exerted some other and more subtle influence upon the nerves themselves; for by no purely mechanical means could we account for the numerous phenomena that followed its use in diseased conditions. General faradization might be said to be indicated, therefore, whenever a constitutional tonic influence was called for.

"This law rendered the remedy as valuable to the general practitioner as to the specialist. For the tedious period of convalescence which often follows typhoid and other fevers there was no remedy that was comparable to it, and in a large number of conditions of depressed vitality electricity in some of its forms would prove of service. In addition to giving passive exercise to the muscles, it rendered more natural the processes of secretion and excretion, corrected circulatory disturbances, and afforded tone and strength to both nerve and muscle. With these principles in view, he said, we cease to wonder that electricity is used and recommended for such a variety of diseases, and appreciate the injustice of the criticism which condemns it because it is claimed to be of service in so many different conditions.

"Having spoken of some of its physical effects, he said that the chemical or electrolytic influences which are associated with electrical action were practically confined to galvanism. Its special utility was in the department of electro surgery; but it was undoubtedly true that some electrolytic action occurs in all ordinary applications of galvanism to the body, while it was probable that it was a factor of more or less importance in making up the sum of electro-therapeutic effects.

"In its influence over nutrition, however, Dr. Rockwell went on to say, the physiological effects of electricity were, perhaps, the most important, the action of either current modifying physiological functions in various ways. He stated that his experience had been that appetite was sharpened, digestion quickened, and constipation relieved, both by local and general electrical treatment, so rapidly as to make it pretty evident that the gastric, biliary and intestinal secretions were markedly affected by the action of the current on the nerves supplying the organs of digestion. These results had also been recently confirmed by Ziemssen by experiments on animals. Among those affections of the bowels in which electricity was quite certain to exercise a beneficial influence were defective innervation, atrophy of the muscular tissue, digestive atony, and the wide section of diseases comprehended under the name of hypochondriacal and neurasthenic.

"At the conclusion of Dr. Rockwell's paper, Dr. C. L. Dana read a short paper which was devoted to a defense of static electricity. A recent writer on electro-therapeutics and physics, he said, had referred to electricity as a form of energy. This was a fundamental error, and showed a lack of grasp of the subject which was truly elemental. Electricity was not a form of energy, but a condition of ether in a state of stress or motion. The same critic also spoke of "producing" electricity; which was as absurd as to talk of producing matter. In static electricity the electrical fluid or ether was in a state of strain, like a thin rubber band stretched to its utmost. When the strain was relieved there was a disruptive discharge, as when the elastic band broke. By using small Leyden jars which filled and discharged very quickly the current could be made almost continuous and would cause chemical effects. The static discharge occupied such an exceedingly brief space of time that its intensity or current strength was hardly measurable; but its voltage or electro-motor force was immense.

"As to its therapeutic uses, he believed that the special advantage of the static battery was in paralyses with some spastic element, as in hemiplegias and paraplegias. Aside from this he said its best results were in chronic muscular rheumatic and neuralgic conditions and in many sensory disorders. It had a specific æsthesia-genetic influence in certain cases; producing effects in a way similar to metalo-therapy—not by mental influence or suggestion. It had practically a very great value in dispensary clinics where a good many cases of paralysis had to be treated. In nervous clinics with a few patients and abundant medical attendance the faradic and galvanic battery might answer, and this might explain the indifference to static electricity by some of its critics; but in large dispensaries he considered it almost a duty to patients to have a battery which induced a prompt and efficient electrical treatment in all cases."

Paraldehyde.

Paraldehyde is an excellent hypnotic, apparently as safe as the bromides, free from deleterious effects, though rather uncertain in its action; and only objectionable on account of its unpleasant odor, which is imparted to the breath. My own experience has convinced me that it is a valuable substitute for opium.—

J. F. A. Adams, M.D., in *Boston Med. and Surg. Jour.*, October 10, 1889.

We are glad to run across friends of paraldehyde, because we feel that it probably has not so many as it deserves. It does not become as rapidly popular as some of the new hypnotics. This is not alone due to its disagreeable odor, which, by the way, most patients will soon become accustomed to, or at least most patients who really need paraldehyde. We are of the opinion that it is not so easy to learn how to use this remedy as some of its competitors for popularity in this new era of hypnotic remedies. The successful use of it consists in giving it to suitable cases in proper sized doses. To do this with anything like uniform success implies of course the necessity of some actual experience; but we think it may not be amiss to very briefly reiterate two items that we some time ago received from other sources and have verified by our own experience in the use of this drug. First, it is a valuable hypnotic and sedative in conditions of nervous depression; *e. g.*, neurasthenia, insomnia, melancholia, and chronic or acute alcoholism with the characteristic depression that often accompanies either form. Secondly, we are apt to give too small instead of too large a dose. We would hesitate to say any thing that could be construed into a recommendation of a careless or indiscriminate use of any medicine, and especially a hypnotic medicine, and more especially a hypnotic of as much power as paraldehyde. But we think a dram rather than a half-dram the minimum dose from which we may get a hypnotic effect worth the while in a large majority of the instances when we would employ it. Often we have seen no satisfactory effects until we reached a dose of two drams. Occasionally we have given three drams. What the effects may be from long continuing the drug in large doses we have not the means of knowing. But we have never seen any unpleasant immediate effects, to speak of, compared with those of an equally free use of chloral or sulphonal.

Multiple Neuritis.

We recently heard an unkind criticism, pardonable on the score of ignorance, to the effect that it is fashionable amongst neurologists now-a-days to call everything that they possibly can "multiple neuritis." This individual does not dream of how frequent occurrence neuritis is, and as he is not likely to find it out in any other way we shall send him a copy of the Review containing our report.

The more thorough study of the pathology of multiple neuritis has led to the examination of the peripheral (and other) nerves in a rapidly increasing number of cases of tabes dorsalis; and the presence of more or less neuritis is almost constantly found. We introduced into our last report in this department an excerpt touching on this interesting topic. The following, however, is more recent and far more extensive.

Oppenheim and Siemerling report fourteen cases of tabes dorsalis with autopsies in which the peripheral nerves were examined. These autopsies were supplemented by the examination of the nerves in thirty-two other cases of wasting disease—tuberculosis, marasmus, inanition, senility, arterio-sclerosis, alcoholism, lead, typhoid, diphtheria, cancer, cerebral disease, sinus thrombosis and syphilis. In the majority of all these cases, including the cases of tabes, changes were found in the peripheral nerves, chiefly in the form of a parenchymatous degeneration, but occasionally an increase in the perineurium with an increase of nuclei. In many of these cases there were no symptoms pointing to the peripheral nerves. Tabes, however, is regarded by authors as a disease which involves the peripheral apparatus, the sensory cutaneous nerves showing more marked degeneration in this affection than in other diseases, but there is apparently no definite relation between the degree of this degeneration and the intensity and extent of the disease in the cord. How far the symptoms of tabes depend upon this degeneration is still undetermined. The arms are usually affected in tabes long after the legs, and the first symptoms are generally noticed in the distribution of the ulnar nerve, which is given off the lowest of the brachial plexus. Although the ulnar nerve was often found degenerated the authors pronounce against the idea that the sensory disturbance is purely of a peripheral nature, as the peripheral lesions do not satisfactorily explain the symptoms, anæsthesia being found with nerves intact and vice versa. In two cases, disease of the vagus nerve was found with healthy nuclei; here there were laryngeal symptoms probably due to the neuritis, analogous to the commoner oculo-motor disturbances. Beside the ordinary posterior spinal sclerosis, loss of fibres and atrophy of the cells in Clarke's columns were noted.

Dejerine has reported nineteen cases of muscular atrophy in tabes with nine autopsies, atrophy being a symptom which he thinks is present in one fifth of the cases. It is a late post-ataxic symptom of slow onset, and may continue for many years. It usually begins in the extremities, either in the feet, producing pes equinus, or the typical Aran-Duchenne type of atrophy in the hand. Fibrillary twitching was never seen but quantitative and qualitative electrical changes were present. Contrary to the lesions found by Charcot and Leyden the motor-cells of the anterior cornua were in every case healthy. Slight changes were found in the anterior root in four cases, but in every case there was a pronounced degenerative neuritis of the peripheral nerves.

Oppenheim has recently reported three cases of tabes with interesting autopsies. The first case began with slow micturition and headache, vomiting, ptosis and diplopia; later there were lancinating pains, paræsthesiæ, and attacks of dry coughing, like pertussis, and vomitnig and diarrhœa. The pupils reacted to accommodation but not to light, and were unequal. There were partial anæsthesia, ataxia, Romberg's symptom and loss of knee-jerks. There were considerable difficulty in

swallowing, rapid pulse, dyspnœa and much hoarseness with paralysis of somo of the laryngeal muscles. Later there were oculo-motor paralysis and hemiatrophy of the tongue. There were degeneration of the ascending root of the fifth nerve, and disappearance of fibres in the gelatinous substance. The nuclei of the vagus accessory and glossopharyngeus were about normal but the ascending root (solitary fasciculus) and the other root-fibres were atrophied, and there was a very pronounced degeneration of the vagus and its branches. The right oculo-motor nucleus was atrophied. The gastric and laryngeal crises, the rapid pulse, dyspnœa, laryngeal paralysis, and disturbances in swallowing were all ascribed to the disease of the vagus. There were pain, paræsthesia and slight anæsthesia in the face due to disease of the trigeminal roots. The second case had also laryngeal paralysis with no nuclear or peripheral lesion of the vagus. The third case had a rigid feeling in the face, difficulty in chewing, talking and swallowing, ptosis, strabismus, anæsthesia of laryngeal and pharyngeal mucous membranes, and ataxia of the jaw. Here there was atrophy of the ascending root of the fifth and its sensory nucleus.—From an article on Recent Progress in the Pathology of the Nervous System, by Philip Coombs Knapp, A.M., M.D., in *Boston Med. and Surg. Jour.*, October 10, 1889.

Impaired Vision as the Result of Sunstroke.

Most articles discussing the etiology of atrophy of the optic nerve mention sunstroke as one of the causes; and treating upon the sequelæ of sunstroke mention blindness as one of them. But as to any information as to the frequency of atrophy of the optic nerve as the result of sunstroke, or as to the pathological conditions, the symptoms, diagnosis or treatment, these works make no mention; and the only report of cases that proved of any value in my researches was that of Dr. Hotz, in a paper entitled "Notes of Intra-ocular Lesions Produced by Sunstroke" (*Am. Jour. Med. Sciences*, July, 1889). In this paper Dr. Hotz reported a number of cases in which an ophthalmoscopic examination shortly after the sunstroke revealed an optic neuritis. In none of these cases was the swelling of the optic nerve excessive, and all recovered with vision little, if any, impaired, and a very slight, if any, atrophy. In the *Med. Rec.* of April 28, 1888, there appeared a paper by Dr. Thos. A. Spaulding, of Portland Me., on the subject, a part of which was read at the preceding meeting of the American Ophthalmological Society. In this paper it is stated that "no member present had ever heard of the sight being affected by sunstroke." As this statement appeared to be somewhat remarkable, I addressed letters to a number of physicians who, owing to long experience in military and civil practice, I thought would have met such cases; but all the physicians to whom I addressed these letters answered that they had never met a case of blindness or impaired vision as the result of sunstroke.

Among 13 cases referred to me for expert examination with impaired vision, alleged as the result of sunstroke, I met three cases of simple hypermetropia, two of senile cataract, one of progressive myopia, one of detachment of the retina, and one of disseminated choroiditis, probably of syphilitic origin. Judging from these cases, and from the almost entire absence of references to this subject in medical literature, I am not surprised that many observers are inclined to doubt the existence of impaired vision as the result of insolation. I wish to put on record the following cases, which, to my mind at least, present conclusive evidence that vision is sometimes impaired as the result of sunstroke; and it is to be hoped that in the future the fundus of the eye will be carefully examined in all recent cases so that the frequency of optic neuritis as the result of this cause may be determined.

(Here follows a record of four interesting cases). In view of these cases, notwithstanding the fact that out of 13 cases of alleged impaired vision as the result of sunstroke 9 were found to be suffering from affections that could have no possible connection with this cause, I am led to believe that impaired vision does result from sunstroke in a large number of cases. We would expect this from an affection which produces such a profound impression upon the cerebral centers.

It is not necessary for me, before such an audience as this, to enter into a detailed account of the intimate relation existing between the optic nerve and the brain and its meninges. I wish simply to emphasize the importance of making an ophthalmoscopic examination of the *fundus oculi* in all cases of *coup de soleil.* This examination should be made immediately after the attack, at a somewhat more remote period, and in all cases where there is alleged impaired vision as the result of sunstroke, no matter if it be a period many years afterward.—A. R. Baker, M.D., *Jour. Am. Med. Ass'n.*, Dec. 7, 1889.

Electrical Resuscitation.

The late Dr. Griswold, just prior to his death, made some very exhaustive and valuable experiments upon dogs, with the view to find out just what action galvanism had upon the heart and lungs, and whether or not it was depressant in character applied directly or indirectly through nerves in region of the neck. His experiments and their practical results he published in the *New York Med. Jour.*, April 4, 1885.

The subject was briefly though thoroughly investigated, and all his experiments verified by us, and the practical *resume* was, that galvanism was a depressant, and dangerously so when applied in cases of collapse or shock. In dogs, when either aconite or chloroform narcosis was present, and a moderate current used, one pole over the apex and the other over the course of the pneumogastric and phrenic in neck, the heart ceased beating instantly, and respiration ceased as well. In our teachings in the past we have endeavored to impress the fact

that galvanism is dangerous, and ought never to be used in resuscitation of persons who have ceased breathing or have sustained heart-failure. The strong faradic current, however, as a counter-irritant and as a stimulant through reflex action, applied to nipple directly over the heart or by puncture to some nerve-trunk, was of decided benefit. We are glad to note that this is sustained, and especially Dr. Griswold's experiments verified by Drs. H. A. Hare and Edward Martin, in the Warren Triennial Prize Paper, of the Massachusetts General Hospital, entitled "The Value of the Electrical Methods employed for the Resuscitation of Persons who have ceased Breathing" (*University Medical Magazine*, vol. ii., part 2), the resume of which is:

"The action (of galvanism), under these circumstances, on the heart was most striking, for it was found that the only place where the positive pole could contract the diaphragm also inhibited the heart.

If a current, by no means as strong as that frequently used in cases of suspended animation, produces such a profound effect upon the heart of a moderate anæsthetized dog, its effect upon a heart already overburdened by a congestion or depression would be disastrous.

It would seem probable that in those cases where the use of electricity has been resorted to, the return to life has been the result of reflex stimulations rather than a direct effect on the phrenic nerves. On the contrary, the striking effect upon a heart, shown by tracings, suggests the thought that improper application of electricity may in the past have been an important factor in determining a fatal issue."

"The observations of these gentlemen fully confirm that of Dr. Griswold, and are fully endorsed by us.

We regret exceedingly that Dr. Griswold's most excellent paper had not been known to these gentlemen in helping them to quick decision as to the dangerous effects of galvanism in cases of suspended animation.—Ed. *Jour. Nervous and Mental Diseases*, Sept., 1889.

A Case of Tænia in a Baby Ten Weeks Old.—A baby ten weeks old was brought to Dr. Mensinga, of Flensburg, the father of the child having previously shown to him a sort of worm said to have come from the anus of the patient. With the child the parents brought, in alcohol, about twenty links of a tænia. The baby had just had a stool. The fæces in the diapers were quite compact and full of the moving proglottides which, changing peristaltically their forms, completely pervaded the fæces.

It was discovered that the man had killed a pig when the child was two weeks old, and on finding that it was measly, sold it in the city. Peculiar circumstances must have combined to introduce the germ of tænia into the baby. Nourishment—milk not boiled—being given to the latter with the bottle, the dishes had probably been used for the milk as well as for the pig-killing, and not being cleansed thoroughly, had thus carried the affection to the child.—*Internationale Klinische Rundschau.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D.,

Editor.

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SATURDAY, DECEMBER 28, 1889.

The Dangers of Electricity.

The general system of electric lighting which is soon to be inaugurated in Saint Louis will no doubt be an improvement over the present system in many respect, but it carries in its train the opportunities for the singular and horrible accidents from electric shocks which have occurred so frequently of late in New York and other cities in which electricity is in general use for lighting purposes.

How to prevent these accidents has been the query for some time. It has not been suggested to discard the electric light, for in these go-ahead days such a proposition would be looked upon as a symptom of idiocy, if not insanity. Efforts have been chiefly directed towards securing better and more perfect insulation of the wires and this has been done with but indifferent success, if we may judge by the results, in the shape of fatal accidents, occurring chiefly among the employes of the electric light companies themselves. So far as is known at present, there is no material which will afford thorough insulation with any degree of permanency, that possesses also the other requisites, such as cheapness, compactness, light weight, etc., in such a way as to recommend it for general use. The best material which is at present in use, will deteriorate or wear off in a comparatively short time, and thus allow the deadly current to traverse other and in themselves innocent wires, in this manner adding a hundred-fold to the danger. There is danger from a number of other causes, which can only be explained by practical electricians, and perhaps not even by them. The plan of putting the wires underground does not offer much prospect of improvement, for the same reason; in fact, other complications which would enter into the problem might only increase the insecurity.

Any feasible plan of relief from this source of danger would be indeed a boon, and it is to be hoped that the recent invention of new system of a lighting apparatus by the Westinghouse Electric Company, as noted in the daily press, will bear out all the promises made for it.

The dynamo from which the current for the lights is generated is very different from any dynamo used for a similar purpose. It is so constructed that it delivers the required number of amperes whether the machine is supplying one lamp or its full quota. In addition to the dynamo, the system has an entirely new arc lamp. The principal point in which the lamp differs from all others, is that its carbon lasts for three nights. The lamps may be so connected in the circuit that no person coming in contact with it can receive a shock from the line. Such a thing seems almost incredible, and if it be true, this system will entirely revolutionize the arc-lighting now in use. With the substantiation of the above claims, it should be made by law to supersede the present system,and so relieve us of one of the dangers which modern inventive genius has saddled upon us, side by side with its many blessings.

Is Inebriety a Disease?

This question has been the subject of much discussion of late years, chiefly from the fact that in a number of criminal trials, in which the accused were intoxicated at the time the crime was committed, the defense have dilated upon that fact, and have argued on the line that inebriety is a disease, rendering the individual irresponsible for his action.

Dr. W. F. Mitchell publishes a communication in a recent number of the *Med. and Surg. Rep.*, in which he contends that inebriety should not be regarded as a disease, but only as a vice, for the results of which a man should be held criminally responsible in the last degree; he denies the influence of heredity as a factor in the causation of inebriety, and attempts to deride the "theorists" and "learned doctors" who believe that drunkenness is a disease.

He proceeds to give the reasons for his belief at some little length, and bases them on the results of his personal experience and observation, which, to an unprejudiced judge would seem to be too limited and superficial to deserve the overwhelming weight which he attaches to them.

The question is one which deserves earnest study and careful observation by unbiased men, and cannot be decided by the utterance of a few dogmatic, random thoughts on one side or the other. The field into which it leads us is one which has been, comparatively speaking, but little trodden; the foot-prints have left lighter impressions than in other fields of special research.

Enough seems to be known, however, to substantiate us in the belief that inebriety may, in certain cases, be properly termed a disease, sufficient at times to cause the individual to be irresponsible for his acts.

On the other hand, the plea of alcoholic insanity in criminal cases is becoming to be a very common one in our courts, and is too often merely a crafty dodge to evade justice. Such claims should be carefully sifted down; heredity, and all other factors and circumstances should be looked into before coming to any decision. To do this fairly and impartially requires a change in the present system of expert witnesses, a change which is desirable for many reasons. As things stand at present, we usually have an array of medical witnesses on either side, diametrically opposed to each other, and posing as "authorities" and "experts," and lowering in popular estimation themselves and the science they represent.

A New Resource; The Temporary Transfixion Ligature.

Dr. Thomas H. Manley, of New York, in the *Inter. Jour. of Surg.*, proposes the temporary ligation of arteries to prevent or avoid hæmorrhage, where permanent occlusion of the vessel is not desired.

The material is preferably silk, as against silver wire and catgut, which are unsuitable for various reasons. The needle is of well-tempered steel, spear pointed, with length and curve adapted to the situation of the vessel, according as it is deep or superficial. The desideratum is to bring the needle out as near as possible to where it entered. Both needle and thread, as well as the site of operation, should be aseptic.

The vessel should be located as accurately as possible when the needle is passed in, on as near a vertical line as may be, and sent down perpendicularly, until it is reasonably certain that the base of the vessel is passed, when the heel of the needle is quickly made to describe the segment of a circle at as sharp an angle as possible, in order that the needle's point may participate in the movement of the hand, and reach the surface again by embracing as little of the tissue as possible. The *venae comites* must be always included with the artery. During this time the artery should be fixed by the fingers of the other hand. The thread is now tightened and fastened when pulsation has ceased. If the femoral or brachial artery is the one to be tied, it should be made superficial by rotating the limb outwards and adducting. If a vein of any size has been punctured, the needle should be withdrawn and re-introduced further down.

He first employed this method in an amputation at the hipjoint. The patient being a female with a large amount of adipose tissue, he first began the oval flaps and dissected them back an inch or two, so as to more fully expose the artery, after which he tied it. The operation was entirely bloodless, and when the gaping mouth of the femoral was found in the wound it was tied and the temporary ligature removed. Recovery was uneventful.

In a case of epithelioma of the lower lip, cocaine was injected as an anæsthetic, and a needle with double thread passed from within outwards through the lower lip ½ an inch below its border and near the angle, on

each side, and firmly tied. The operation was then done in the ordinary manner without the loss of a drachm of blood, after which the ligatures on the coronary arteries were removed.

In a case where the ulnar and radial arteries were divided by a cut, and bleeding profusely in spite of the compresses, etc., he employed this method, as he had no assistance, and could not find the ends of the vessels. Having secured help, he returned, and tied the arteries and sewed the cut at his leisure.

In a case of herniotomy the internal epigastric artery was cut accidentally. Being unable to find it on account of the stream of blood, he passed a thread through the skin, under the artery, out again, and then tied. Having found and ligated the severed end, he removed the first ligature and proceeded with the operation.

It is particularly applicable in an amputation at the shoulder joint, as well as in the other operations through the joints. The ease, simplicity and success which attend its use, warrant its general adoption under many circumstances.

As the ligation is done under aseptic precautions, phlebitis or sepsis from laceration or puncture of a vein need not be feared, neither is there danger of hæmorrhage.

As to the danger of clotting in the artery, this will not take place for many hours if the vessel walls are healthy. In the hands of the careless, the artery itself may be wounded. Under antiseptic precautions, no harm can come from pressure of the nerves, unless they be essential to life, as in the neck. One of the most serious objections is the laceration or piercing of the nerve-trunks; moderate laceration is of no consequence, as nerve tissue is readily regenerated. This is of course not to be considered in an amputation.

The widest use of this measure will be on the battle field, where its obvious advantages will be of incalculable benefit in saving life. It may be readily employed in emergencies, when instruments and assistants are not at hand, by means of an ordinary needle and thread. It may be employed in the rupture of a varicose vein, or in superficial wounds of the neck where the jugulars remain distended, as in canalization. It may also be used on the cervical veins in operations where the entrance of air is feared.

A large field for its use is in the treatment of aneurisms, especially traumatic, where the arteries are not diseased. The circulation may be simply retarded, as much as may be desired, without wounding the vessel, or it may be shut off entirely. With small, superficial aneurisms it should work admirably.

The method will not supplant others which have stood the test of time, but it will be a valuable accessory. Of course occasions will arise which will prohibit its use. It should not be used where forceps, digital or bandage pressure, or the tourniquet will suffice, nor in the case of deep seated vessels unless the parts are well cleansed, and the materials quite aseptic. Though at first sight the objections to its use seem formidable and numerous, on a careful analysis of them they are not so great as they appear.

MEDICAL ITEMS.

Weight of a Blood Corpuscle.—A human blood corpuscle is said to weigh one five-hundred-millionth of a grain.

Somnal.—M. Constantin Paul reports excellent results from the use of somnal in sleeplessness in connection with acute rheumatism.

A Large Fee.—Dr. Neumann, of Vienna, who attended Dom Luis I, the late King of Portugal, during his last illness, received a fee of about $20,000.

The Duration of Vaccine Protection.—Dr. Gerstacker, a German observer, places the average duration of the protection against smallpox at ten years.

Dr. Hans Virchow, son of the well-known professor, has been appointed Extraordinary Professor in the Berlin University, in recognition of his eminence as an anatomist.

A Recipe for Festive Occasions.—Two drops of creosote made from beech tar, given with a little water, is a specific for hiccough arising from drunkenness.—*Ind. Pharm.*

Electric Executions.—The suggestion is made that New York might get out of its electric execution dilemma by putting condemned murderers at work as telegraph linemen in New York City.

And Horses Too!—Like its predecessors, the present epidemic of influenza is not confined to the human kind; the horses of London have been affected to such a large extent that the price of cartage has gone up in the coal and other markets.

Death of Professor von Volkmann.—On Nov. 28, Richard von Volkmann, the illustrious surgeon of Halle, died at Jena in the "clinicum" of his friend, Binswanger. He had long held a leading part amongst the surgeons, not only of Germany, but also of Europe.

The Ravages of Cholera.—It is officially stated that between July, 1888, and August, 1889, 60,385 persons died of cholera in the Philippine Islands. Both the authorities and the people seem to accept the situation as quite in accordance with the eternal fitness of things.

The Treatment of Lymph Adenomata of the Neck by Arsenic.—M. Reclus recently reported to the Societe de Chirurgie, Paris, the histories of eight cases of

lymph-adenomata of the neck, which he had treated with Fowler's solution in large doses, internally and by interstitial injections. All were cured by that means.

Practical Microscopy.—Dr. L. Bremer will open a new course in practical microscopy for physicians at his laboratory in the Missouri Medical College on January 2, 1890; duration 6 weeks. Lessons on Tuesdays and Thursdays from 8 to 10 p. m. Classes limited to 12. For particulars apply to Dr. F. Walter at the laboratory.

One of the Dangers of the Nursing-Bottle.—An infant, æt. 4 months, was lately reported to have been choked to death by swallowing the rubber nipple of a nursing-bottle. The insecure way in which nipples are often attached to the bottle, as well as the custom of leaving the infant alone with a bottle to quiet it, gives grounds for expecting the greater frequency of such accidents.—*N. Y. Med. Jour.*

The Disinfection of Books.—The Boston Health Board has ordered that the public library ticket, held by any person in whose family a case of contagious disease has occurred, be stamped so as to show the presence of such disease. All books returned with a card so stamped are to be disinfected, and no other books can be taken out on this card until an official notification is received that the danger of contagion no longer exists.

For Hæmorrhage After Tooth Extraction.—A dental exchange recommends the following treatment, which has proven successful in many instances, for secondary hæmorrhage following the extraction of a tooth. The socket is plugged with cotton wool saturated with perchloride of iron, and over this is adapted a plate made of Stent's composition, which is used by dentists for taking models of the mouth, lined with a mixture of tannin and gum tragacanth. The whole is retained in position by keeping the jaws in contact by an ordinary four-tailed bandage.

A Jury of Matrons.—One of the farces of English law is the jury of matrons, used in certain criminal trials of female prisoners, after sentence of death has been passed, for the purpose of finding whether the accused is *enciente* or not. If this be the case the prisoner receives a respite. As a rule, the jury is sympathetic, and so non-pregnant women are respited on false pretenses. The absurdity of the thing at once strikes the average person, who realizes the difficulty which physicians often experience in coming to such a decision, and the facility with which lay-women usually arrive at such a diagnosis.

Extirpation of a Seminal Vesicle.—Dr. Ullmann, assistant of Professor Albert, has recently extirpated the seminal vesicle and the vas deferens on the right side in a patient, æt. 19 years, who some weeks ago had been castrated on account of tuberculosis of the right testicle. The operation was performed to prevent the infection of the genital organs on the left side, which seemed to be healthy. The incision was made through the perineum, and then the infiltrated right vesicle and the right vas deferens were removed, while the corresponding organs on the left side remained intact. After a few weeks the wound was healing perfectly and the patient is now in good health.—*Lancet.*

Dryness of the Throat.—Dr. Solis-Cohen, in the *Med. News*, recommends the following ingredients in the form of a lozenge, to be dissolved gradually in the mouth:

Fluid extract of pyrethrum, -	2 to 3 minims.
Pilocarpine hydrochlorate, -	$^1/_{32}$ grain.
Pure extract of licorice, -	2 grains.
Powdered acacia, - - -	2 grains.
Glycerin, - - - -	1 minim.
Sugar, enough to make - -	20 grains.

One of these may be taken every two, three, or four hours, as may be indicated. This is especially serviceable for singers and speakers just before a concert or lecture.

Post-Graduate Courses in Vienna.—The number of American and English physicians attending courses in Vienna has again increased this year. Over eighty fresh students arrived here last week from America and England. More than sixty courses on various branches of medicine are conducted here during the whole session. They last from four to six weeks. The courses on Laryngoscopy, Ear Diseases, and Gynæcology are especially well attended. It is hoped that the proposed Anglo-American Medical Association will soon be formed, as its by laws will be approved by the Austrian Government within the next few days. Students can easily obtain information here as to the courses, a list of which is published every week by the *Vienna Weekly News*, and is posted on boards, etc., at the Medical Inquiry Office, IX., Maximiliansplatz, 13, and at the English Library, I., Landesgerichtsstrasse, 12.—*Lancet.*

Effect of Serum of Diseased or Infected Animals on Pathogenic Microbes.—M. Charrin and Roger have made a large number of experiments for the purpose of throwing light on this interesting subject. Researches have been conducted before, notably by Grohmann, Nuttal and Buchner, which have demonstrated that the blood serum constitutes a medium very unfavorable to the development of microbes, but Charrin and Roger have lately taken up the subject together, and in studying the development of pathegenic microbes in the serum of animals, diseased or vaccinated, with reference to the pyocyanic bacillus, have arrived at the following conclusions:

1. That the serum of animals, diseased with pyocya-

nosis, into which a .02 cc. of a culture of the bacillus in question is placed, is clouded infinitely less than that of a healthy animal, that is, it is relatively more refractory to the culture.

2. That with animals vaccinated by means of small doses of living cultures of moderate virulence, the serum is still refractory, but less so than that taken from animals which suffer from the disease itself.

This shows that the microbicidal power of serum is augmented by vaccinnation, and that the various humors of the economy and particularly the aqueous, partake of the same property.—*La Tribune Medicale.*

Influenza.—(Cable reports from *Der Deutscher Correspondent*, Baltimore, Md., translated for the U. S. Marine Hospital Service.)

Berlin, December 14.—Professor Leyden, who last evening made an address in the "Clinical Institute," attributed the influenza epidemic to the same causes that produce the dengue fever, which makes its appearance particularly in the East. The medical periodicals state that the epidemic keeps spreading.

Professor Virchow has recovered from his attack of influenza; several members of the imperial family have also been attacked by the same. The *National Zeitung* is censuring those who spread pessimistic theories about the epidemic. This paper shows that the sanitary condition of Berlin is excellent, and that its mortality is smaller than any other capital city of Europe, with the exception of London. Official data of the number of cases of influenza have not been made. It is known, however, that but few families have escaped the plague, and that a third of the population has been ill with it. The medical press refutes the theory that there is any connection between the influenza plague and cholera, although it is known to be a fact that cholera has repeatedly appeared after an influenza epidemic.

Berlin, December 15.—The number of cases of influenza is rated at 15,000. In many courts the administration of justice is suspended on account of the judges being ill with influenza. It has been proposed to close the schools in Danzig, half of the school children being ill with it.

Antwerp, December 13.—The influenza epidemic has made its appearance here, and many soldiers of the garrison are ill with it.

Paris, December 11.—The epidemic of grippe keeps spreading. The disease has broken out in the barracks, the markets, and at the "Ecole Centrale." A medical report on the raging epidemic shows that among the employees of the large dry-goods emporium, "Magasin du Lanure," 670 have fallen sick. The disease generally lasts four days, and complications only arise in rare cases. In other large stores the disease is raging in the same degree. Special preventive measures are considered unnecessary.

Rome, December 13.—The influenza epidemic has broken out here in a mild form. Dr. Canabis, director of the board of health, has gone to St. Petersburg to study the disease there, and, if possible, to confirm what caused it to assume later a malignant character. This is done to avoid a similar result here.

Paris, Dec. 26.—The epidemic has assumed a graver type and many cases are now complicated with pneumonia. In consequence of the constantly increasing crowd at the hospitals, the authorities are erecting tents for the sufferers. The undertakers are over-worked, and many of their employees are down. In consequence of the increase in the number of funerals, the system of draping the churches with enormous hangings of black and the expensive parade of various emblems of woe has been dispensed with by authority. The official return of deaths for the week gave 200 more deaths than for the preceding week.

Dr. Germaine See read a paper on the influenza before the Academy of Medicine in this city, which was discussed by other distinguished members of the profession. Dr. See thought the Academy should not encourage the opinion that the epidemic was without gravity. He said that the patients were very apt to have pneumonia or bronchitis in fatal forms.

Dr. Dujardin-Beaumetz disagreed with Dr. See as to some points in the nature of the malady, but not as to the fact that it is not always benign. He believed that the epidemic was a form of the dengue—a peculiar erratic epidemic fever allied to the rheumatic affection. He had observed that it presented two phases, first, a nervous phase and next a catarrhal phase, and that there was sometimes an eruption—a simple rash. The varieties in the disease were due to the preponderance in a case of any one of these facts.

Dr. Rochard suggested that the rash might, perhaps, not be a sort of the disease, but only a consequence of the large quantities of antipyrin given to the patients.

All the doctors concurred in the opinion that the disease is not harmless, and that in case of relapse the consequences are very serious.

Berlin, Dec. 26.—The epidemic is decreasing here. It is spreading at Bremen and the managers of the gas works have notified consumers that the supply will be short for a time in consequence of the sickness of many employes. At Darmstadt it is very severe, and in Vienna there are many cases in children, followed by measles. The Christmas festivities were made very dull, as few families celebrated the day. Reports from the Austrian Provinces are that the malady prevails among the horses.—*St. Louis Republic.*

Lemon Juice in Epistaxis.—Dr. Fanchon, in the *Ravue General de Clin. et de Therap.*, speaks most highly of the value of lemon-juice for the local treatment of stubborn nose-bleed. In one case in which the hæmorrhage was most severe, and in which plugging of the anterior nares had been resorted to without avail, a single injection of lemon juice, made with the aid of a glass syringe, into the nostril that was bleeding, immediately arrested the hæmorrhage.—*Med. News.*

SOCIETY PROCEEDINGS.

McDOWELL MEDICAL SOCIETY.

Twenty-ninth Semi-Annual Meeting, held at Henderson, Ky. November 11, 1889.

[CONCLUDED.]

Discussed by Drs. Vance, Owen, Lydston, and discussion closed by Dr. Pendleton.

DR. E. H. LUCKETT, Owensboro, Ky., read a brief paper on

THE RELATIONS OF MOTHERS IN NURSING THEIR CHILDREN.

He said in investigating the operation of natural laws we cannot fail to observe the mutual relationship and reactions which they produce in their fulfillment, and this relationship holds good whether they are acting rationally or aberrantly. In no field of their operation is this to be more observed than in the laws regulating biological processes or pathological divergencies. Each law as it applies itself to the development of functional activity in this or that organ is aided by its relationship. In but few organs is this law more beneficiently displayed than in the milk glands and the uterus where the one has for months been caring for and growing a living being and the other developing for the care of the infant in its independent existence. To ruthlessly set this order at defiance is to invite serious disaster to the woman, and greater perils to the child. There is no condition of humanity more to be deplored than that arising from the pathological conditions following birth, and among the many causes for these disturbances failure to nurse stands out boldly and forebodingly. That every mother should nurse her child—except from want of milk or grave disease—will not be gainsaid; it is the demand made by the law of her condition and she cannot shrink the task or transfer the responsibility without inviting injurious results to her self and taking large chances for physical and mental defects to her child, entailing upon it a puny existence and too frequently an early death. Nature intended that woman should nurse her children and consequently that pregnancy and childbearing should not occur oftener than the normal condition permitted, amounting to one child-bearing period in each 18 months or two years. But with the dry woman this occurred in from 10 to 15 months, subjecting her to all the mental anxieties, all the nerve perturbations, both reflex and direct, and all the functional derangements, incident to this period, almost continually during the life of her fecundity.

Another condition arising much more frequently in the nursing woman is abortions. This is no doubt to a great extent the result of the frequent pregnancies which women are subjected to. These abortions are one of the most fruitful causes of local pelvic troubles, both acute and chronic, and add largely to the list of penalties which women pay for neglect of duty, in discarding the motherly care of their offspring.

Discussed by Drs. Hanna, of Henderson, Ky., Love, Owen, Lydston.

DR. BRANSFORD LEWIS, St. Louis, read a paper on

THE TREATMENT OF GONORRHŒA BY THE OINTMENT METHOD,

in which he deprecated for reasons given in a previous paper (see WEEKLY MEDICAL REVIEW, p. 246) the use, in the early stages of gonorrhœa, of astringents, caustics, or other means, antiseptic or otherwise, which would tend in any way to increase the irritation already present.

Dr. Lewis exhibited the instrument or applicator which he uses, and described it in the following language: "This instrument is simply a hard rubber ointment box, fitted at one end with a screw-piston for pressing the ointment out of the other end into the soft rubber catheter attached thereto. The catheter, having three holes in the end, is a No. 6 French, small enough, smooth enough, and flexible enough to glide for a half inch or so into the most sensitive urethra, generally before the patient knows that it is in. The ointment is then squeezed out, pressure being maintained all the while around the glans, so that it is compelled to pass backward over the inflamed area. The catheter is then withdrawn and a muslin hood, lined with clean, non-absorbent cotton, is placed over the penis and retains the application until the next urination."

Lately he had been using albolene, an ointment base which is such an inert and indolent substance that it neither changes nor becomes rancid with keeping or in combination with medicines. It is odorless and almost tasteless. He prefers it to lanolin because of the qualities mentioned, and is now using it exclusively and with perfect satisfaction.

Discussed at length by Drs. Lydston, Brown, Vance, closed by essayist.

DR. WILLIAM CHEATHAM, Louisville, Ky, read a paper entitled

PHLYCTENULAR OR SCROFULOUS OPHTHALMIA.

He said the management of these cases is quite simple in a great majority of them, but we occasionally come across cases where the cornea may be perforated, or one in which we have frequent relapses, which puts the physician to no end of trouble and worry. In these cases the hygienic management and the constitutional treatment is of extreme importance; in fact the most frequent cause of this affection is bad hygiene. As to feeding, all sweets should be cut off, likewise tea and coffee. Fresh meat should, if possible, be given twice a day, none for supper. Limit the patient to good nutritious food. Patient should be kept out of doors as much as possible. The local treatment in phlyctenular conjunctivitis is cleanliness, with hot or cold carbolized water, as the patient prefers. Atropia sulph., grs. ii, aqua dist., ℥i, to be dropped into the eye three or four

times a day if the inflammation is severe, or if there is any photophobia. If dry calomel can be dusted into the eye about noon each day, with a camel's hair brush, it should be done; or the calomel may be mixed with pulverized white sugar, half and half.

Discussed by Dr. J. M. Ray, of Louisville.

Dr. G. Frank Lydston, Chicago, read a paper on the

Evolution of the Local Venereal Diseases,

in which he said that, following the period of confusion regarding venereal diseases which existed up to the advent of Ricord and his school, came the belief that gonorrhœa was a specific entity and not identical with syphilis. Bassereau, a pupil of Ricord, taught that chancroid and chancre were each specific entities, and this view is the most generally accepted one at the present day. There has arisen, however, in recent years a few heretics, who, while assuming that syphilis is a specific entity, hold different views regarding chancroid and gonorrhœa. Personally, he was convinced that chancroid and gonorrhœa are diseases which may arise *de novo*, and which are in the true sense of the term not specific. It is only by an acceptance of this theory that it is possible to understand something of the origin of these diseases. It may not be possible to demonstrate the origin of all infectious diseases, but it is incomprehensible that a "specific" poison has always existed in any instance. Through the germ theory we apparently see a little regarding the origin of infectious diseases. Diseases are incident to the life of every animal, and as we study the evolution of the animal so should we study the evolution of its diseases. Diseased germs are the natural enemy of men. He has been able to contend successfully with all other adverse elements, but not with those little organisms, the germs of disease.

He believed that the local venereal diseases are the result of the propagation and differentiation of germs primarily innocuous. The innocent germs of the atmosphere may multiply in a favorable environment and the result of such multiplication finally becomes, through successive cultures, virulent. Filth, heat, moisture, and protection from air and light favored such charges. Thus the descendants of inocuous germs may have properties which are innocuous,dependent upon the environment in which they are developed. Thus we may have by a process of evolution an apparently spontaneous development of disease germs. In the higher degrees of cultivation the germ would necessarily acquire properties by virtue of which it would almost invariably produce so-called specific results.

The effects of the germ, even after it enters the tissues of the human being vary according to (1) its virulency and vitality; (2) the inherent vitality of the individual affected; (3) idiosyncrasy; (4) activity of elimination; (5) the condition of the tissues; (6) the number of germs and length of time of exposure.

The experiments of Pasteur on chicken cholera show conclusively what may be done in the way of modifying germs by proper culture. Is it unreasonable to suppose that such cultivation may occur in nature's laboratory? As a consequence of the widespread variation in the circumstances controlling the development of germs in the female vagina, the essayist believes that there may result from different inoculations of essentially the same products of evolution, different degrees of infection. Thus the disease acquired by exposure to materials may be (*a*) simple balanitis; balano-posthitis or venereal vegetations; (*b*) simple urethritis; (*c*) virulent urethritis; (*d*) simple venereal ulcer, indistinguishable from advanced herpes, and (*e*) classical chancroid.

Discussed at length by Dr. Bransford Lewis, (will be published).

The Society then adjourned.

SOUTHERN SURGICAL AND GYNÆCOLOGICAL SOCIETY.

[continued.]

Dr. Joseph Taber Johnson, Washington, D. C., presented a paper entitled

Observations Based Upon an Experience of Seventy-two Abdominal Operations.

Of this number, 29 were for the removal of ovarian tumors varying in size from 1 to 64 pounds, with 26 recoveries and 3 deaths; 29 cases of removal of the uterine appendages, with 27 recoveries and 2 deaths; suprapubic hysterectomies for large uterine fibromas, 3 recoveries, 4 deaths; 1 Cæsarian section, death on the tenth day, 1 fatal case of extrauterine pregnancy, etc. Total, 72 laparotomies with 59 recoveries and 13 deaths.

Dr. Johnson emphasised the statement that experience in operating was nowhere so valuable as in the abdominal cavity, that the unexpected was so often found that many cases were lost if the operator was not prepared for and equal to the emergencies as they unexpectedly arose. The preparation of the patient was discussed, especially with regard to the condition of the bowels, also the time and place for operating. The length of the incision and the time occupied by the surgeon also received attention; the strength of the patient was conserved directly in proportion to the shortness of both. Clover's inhaler was preferred for administering the anæsthetic. It was advised to close the abdomen with many sutures, in order to prevent ventral hernia. He objected to giving opium to patients. He opened the bowels early, always with saline cathartics.

Dr. R. E. Hadra, of Galveston, Texas, read a paper entitled

Open Abdominal Treatment,

in which he contended that the present treatment for diffuse peritonitis were defective for very obvious reasons. If the whole cavity, with all its nooks and corners be in a suppurative condition, as found in septic, puerperal or perforative peritonitis, then even the boldest

surgical attempts to free it as now practiced, are entirely inadequate. Washing out the cavity through a drainage tube, or even multiple drainage, will not suffice to thoroughly cleans out all the pockets and recesses. They cannot all be reached. Then again, when the bowels become distended, a new danger from immoderate compression of the bowels and the other abdominal organs is added. The consequences are, structural changes of their walls, which must thereby become permeable to the germs, and thus turn into a medium of exchange between the infectious contents of the gut and the intraperitoneal fluids. Under such circumstances the bowels represent foreign bodies of extremely poisonous nature, and make the method of puncturing or incising them a source of only temporary relief. Obviously, it would be better to exclude the gut entirely from the cavity.

The absorption of the septic material by the peritoneum and the lymphatics of the diaphragm, which, according to Rechlinghausen, open into the abdominal cavity, is to a great extent controlled by the intra-peritoneal pressure. If we now open the abdominal cavity this pressure and the siphon suction must be accordingly done away with. From all these considerations, we should receive the open treatment as a great step forward. The cavity can then be well cleansed and kept dry, which would greatly interfere with the proliferation of germs. The bowels being kept outside, the resorption and soaking up of the poisonous fluids would be very much lessened.

By 'open treatment,' the author means full exposure of the cavity by a large incision, so as to permit of the frequent cleansing and the retention of the bowels on the outside to such an extent as is necessary—of course under proper precautions, and only as long as the case requires it. Then the abdomen can be closed up by secondary suture.

In support of these views, one imperfect trial on a man, and several thoroughly satisfactory ones on animals, were related.

The details given in the paper make this seemingly bold treatment (which is, of course only intended for the severest forms of septic peritonitis) apper to come within quite reasonable surgical bounds.

Some details were given as to the technique of the open treatment. The incision was to be about 14 inches long, using the navel as a center. It was, of course, to be made in the median line. The protruding bowels are then placed on the skin of the abdomen, the aseptic hand is passed into the cavity for the purpose of loosening the adherent intestines. The patient is laid on his side, and the viscera are thoroughly flushed. The water that remains after this is sponged out carefully and a large iodoform plug is left in the corners. If the bowels are distended, they may be punctured. A piece of gutta percha tissue is fastened to the skin around the wound and folded over the intestines. Gauze and absorbent cotton are so arranged that they may soak up all secretion. A cradle is placed over the abdomen so as to keep the bed clothes from pressing too much. The temperature of the patient should be kept under close observation all the time. The dressings should be removed as often as indicated by the amount of discharge collecting on them, say once in 24 hours. The administration of alcohol must not be neglected. As soon as the danger is considered to be over, and as soon as the bowels regain their normal calibre, disinfected gutta percha tissue may be inserted between them and the skin and in that way they are gradually returned to the cavity.

Dr. L. S. McMurtry, of Danville Ky., read a report (see page 501) of

Twenty Consecutive Cases of Abdominal Section.

Dr. Richard Douglas, of Nashville, read a paper entitled

Complications Occurring in the Clinical History of Ovarian Cysts.

In the natural history and growth of an ovarian cyst there are impending accidents and complications occurring, rendering diagnosis doubtful and operation questionable, permissible, or imperative.

The development of a cyst is in itself so pronounced a pathological process, that it is but reasonable to anticipate danger. To distinguish the symptoms so arising from those of other peritoneal diseases, and to relieve the pain and immediate distress, are questions of material concern to the practitioner; these were the questions to which the reader gave especial attention in his paper.

Experience, he thought, showed that general and subjective symptoms were almost valueless in the diagnosis of ovarian cysts. The entire group of rational and associate symptoms might be negatived by the physical signs. From the incipiency of its growth to its termination, ovarian cyst is liable to certain accidents, attributable to the characteristics of the tumor and the peculiarities of the patient.

The complications may be divided into two classes: first, those affecting the tumor itself—viz., adhesions, twisting of the pedicle, inflammation, suppuration, rupture, calcification, and others of minor importance. The second class complications due to the presence of the tumor, but not affecting materially the growth itself, such as ascites, albuminuria, marasmus, and intestinal obstructions. Pregnancy is a decided complication, but neither a disease nor a tumor. As to the diagnosis of adhesions, the clinical history is in some measure a guide, yet the writer recalled a case in which the patient went through three attacks of peritonitis, and yet in the operation, not a single adhesion had to be broken. Strangulation of the pedicle, from torsion or otherwise, causes venous stagnation; mortification would quickly supervene, were it not that adhesions are promptly formed. Omental adhesions are by far the most frequent.

The hæmorrhage attendant on the separation of these adhesions may be controlled by pressure; if that does not check it, and it is expedient to ligate, the salt of iron may be employed.

Rotation of the tumor, with torsion of the pedicle

may happen. The only physical conditions necessary for this, are, a tumor free from adhesions and a pedicle of sufficient length. Symptoms of varying severity follow the accident, according to the degree of strangulation. Schurnoff considers suddenly-developing ascites as indicative of torsion of the pedicle. Such a condition may be confounded with ruptured ectopic gestation sac, but in the latter, the shock is much more profound. If the patient survives the first shock attendant on rotation of the tumor, the subsequent history is inflammatory. Twisting of the pedcicle has been taken for intestinal obstruction; the readiness with which the bowels act under medication should eliminate this source of error.

In consequence of twisting of the pedicle, there is interference with the circulation, venous stagnation occurs first, arterial pressure continues to force blood into the tumor, rupture of an overcharged vessel follows, and we have hæmorrhage into the cyst. In this way we may account for the enlargement and tension of the tumor, and no doubt the great shock observed in these cases is largely, if not entirely, due to the hæmorrhage which generally follows in consequence of rotation. The theory of hæmorrhage is more acceptable to me than the twisting of a functionless pedicle. Gangrene does not inevitably cccur.

What are we to do when we meet with a twisted pedicle? If we submit our patient to immediate operation, we are compelled to operate with her in the condition of shock, if not collapse. Knowing that it is exceptional for the patient to die in the primary stage, is it not prudent to adopt the suggestion of Bantock—that it is unwise to operate during shock? Let us wait for reaction which we are assured will be established. It is unusual for a patient to die from bleeding into the sac.

Rupture of the sac sometimes occurs as a consequence of over distension, suppuration, weakening by papillomatous degeneration, or as a result of violence. Cysts that have undergone colloid degeneration are prone to rupture. Calcification is sometimes met with in operations. In case of ascites, it is our duty to establish direct causal relation between the ascites and the abdominal tumor. We must bear in mind the other possible causes for this, such as cardiac, renal, and hepatic diseases. So we must not treat this complication lightly. Albuminuria is frequently a complication of cystoma. The pressure of the tumor may be the cause of the condition, and with its removal, the albuminuria also disappears, that is, when associated with high specific gravity. Albuminuria in urine of low specific gravity is presumptive evidence of advanced kidney disease, and such patients do not bear operation well. The function of the kidneys should always be considered before operation.

Discussion.

Dr. Potter, of Buffalo, New York.—The paper read by Dr. Douglas is an interesting one and concerns every ovariotomist who has any active work to do. The complications of ovarian work are more important than those connected with the other two subjects. But the removal of a simple ovarian cyst is one of the simplest operations in abdominal surgery. One of the reasons why they have become more successful, as far as recoveries are concerned, is that these cysts come into the operator's hands sooner now, and no time is wasted with temporizing methods, but the surgical treatment is begun at once. And this is the proper way to treat it. Adhesions that have been superinduced by the tapping have led writers to condemn that procedure, and properly, too. Another complication that may occur as a result of the tapping, is well illustrated by the case of Dunlap, in 1843. He had been tapping her for two years, taking each time a bucket full of water. Finally his courage grew to the sticking point, and Dunlap operated and cured her of the ovarian cyst. But the kidneys, whose functions had been so long suppressed, took on chronic inflammation, and the amount of diuresis was simply frightful. From this she died.

The complication of pregnancy is an interesting one. I have seen cystic disease of both ovaries complicating pregnancy. There was also dropsy of the abdomen, and on one sides was a tumor which weighed 35 pounds. I cut away both tumors, dropped the pedicles, but hesitated on the question of drainage. I feared that it might possibly influence the question of the woman's going to full term. I left it without drainage and she went on to term and has recovered, and is now about the time of weaning her child.

With reference to Dr. McMurtry's paper, I wish to speak on one point. He said that his work had demonstrated to his mind the propriety of doing this abdominal surgery even at the homes of the patients, and at places aside from ordinary hospitals appointed for that purpose. I think that is a very important question, because it was not very long ago that some of the prominent abdominal surgeons were insisting that it was entirely inexcusable for any man to do such work outside of a hospital. I don't believe that the general hospital is the proper place to do it, nor that the special hospital is necessary. I. am coming to the belief that the wayside cottage is the place to do it. The results there will be quite as good if proper care and cleanliness are observed. And it places the treatment within the reach of the patients who need it most.

With reference to the details of the operation, it would seem almost supererogation to go into that question, but I was pleased with Dr. McMurtry's allusions to it. Generally, when the surgeon who has written on surgical work goes himself to a case, he violates all his own teachings, and I think, therefore, that it is necessary for us to reiterate the rules until there can be no doubt about their being fully carried out. I am fully in accord with his views as to the advisability of avoiding opium in abdominal cases.

Dr. Douglas, in discussing Dr. McMurtry's paper, said: I think that from a paper of this character we can gather more real information than from volumes carefully prepared, of rusty old sayings that are often not

true. I wish to congratulate him on his excellent results in general practice, not selected cases, and he operated, too, whenever he found them. The doctor develops some very interesting points. The fibroid tumor is not always a hard, fibrous tumor; but that is probably the best term we can get for them. The doctor had a myoma of the uterus, soft and œdematous, and he thought he had an ovarian cyst. It seems he has been going on in the same line as myself; eight weeks ago, I removed the tumor which I now present for your inspection. Clinically, there was a large, fluctuating tumor; I diagnosed ovarian cyst, and Dr. Buist also diagnosed ovarian cyst. The woman refused operation at first, and later on the diagnosis was changed; it had then lost its fluctuation, and my diagnosis was either fibroid, or an excessively distended cyst. It was then more elastic. I opened the cavity and found this myoma, and even when we got into the abdomen and put our hands on it, it was elastic and gave the impression of fluid. So we plunged the trocar into it, but of course got nothing. The tumor was attached to the transverse and ascending colon, and to the omentum over its entire anterior surface. As it had not spread out into the broad ligaments, enucleation was not necessary, and I simply clamped it and removed it.

The question of the best method of dealing with the pedicle in supra-vaginal hysterectomies, is of great moment. All methods that have for their object the extra-peritoneal treatment of the pedicle are more successful and far more satisfactory than the intra-peritoneal methods. There have been several extra-peritoneal ways of treating it. Kelly has recently called attention to a method in which he places a number of sutures in the pedicle and pulls it up into the wound, leaving it there so that the nurse may lift it up if bleeding should take place. I hardly see the advantage of this, because it is undeniable that when once you have placed it, there you must let it stay. Kekky recommends us to ligate the arteries as they run up on the sides of the cervix. Will you please tell us how you can ligate the uterine arteries in a case like this? He amputates the tumor; has he any guarantee that hæmorrhage will not occur? The best treatment is that of Bantock, which disseminates the strain. If you treat it with iron or the cautery you favor suppuration, which you do not want in a pedicle; you want mummification. This stem came away without one drop of pus. The clamp came away on the 16th day, and on the 20th she was as well as she ever was.

Dr. Roberts.—Dr. McMurtry spoke of the necessity of cleanliness in this work; I think we are all agreed as to that. For cleaning the hands I generally use sapolio. I don't think it is necessary to use distilled water. In private cases, I always prefer that the patients should be in an infirmary. We have three in Louisville. I think it is important to have the patients at these places for several reasons; the nursing is better and we can keep company away. But where the hygienic surroundings of the patient are good and she is able to afford the requisite attention, it will do very well. As to the use of opium, I agree perfectly with Dr. McMurtry. But I must say that in the majority of instances, some opium has to be given at some time.

As to diagnosis, I had a case not long ago in which I was perfectly certain that there was disease of the spleen, but when I cut down I found disease of the kidney. Another case that occurred in a maiden woman. There was a tumor which arose above the pubes, and seemed to be behind and to the right of the uterus; the uterus measured three inches. I felt perfectly satisfied that I had to deal with a fibroid, but operation showed that it was a unilocular cyst of the ovary.

Dr. I. S. Stone, Lincoln, Va.—I feel that the society is to be congratulated upon hearing such papers. Fifty years ago it would have been considered a marvel for young men to produce records of such cases as these.

As to the first paper, "On the Open Abdominal Treatment," having had no experience with any such method, I cannot speak on the subject. The only useful application I could make of it would be for pelvic hæmorrhage.

Dr. McMurtry expresses the teachings of Sir Spencer Wells. All who have worshipped at that shrine do not need any illustration of the methods. The third paper treats of a very interesting subject. Plain cases of ovariotomy are the easiest abdominal operations that we can do, but, on the other hand, it may be the most difficult. There is nothing I dread more than adhesions.

I remember once seeing Dr. Martin, of Berlin, do an operation for twisted pedicle in seven minutes. That shows that they are supposed to be dangerous in Berlin. I hope you will excuse me for differing from any teaching to the contrary. All operations give better results when they are operations of elections. Shock means peritonitis. I never saw a case of abdominal injury, whether from the kick of a horse, a stab, or what not, that was not exudative peritonitis as soon as the abdomen was opened.

[TO BE CONCLUDED.]

SELECTIONS.

A NEGLECTED PHASE OF ENURESIS NOCTURNA.

So much is continually appearing in medical journals on the subject of enuresis nocturna, and so many remedies are being recommended as wholly reliable and efficacious in its treatment, that it would appear almost superfluous for us to refer to it. And yet, if we examine all this literature, we will see that it has a very one-sided aspect; that (except in cases arising from reflex irritation or organic lesions, whose treatment is indicated by the discovery of such a cause—a class which we do not propose to consider here) nearly all of the remedies advised are used either empirically, or their use is based on the idea that the origin is invariably, as

Trousseau declared, a neurosis, an excessive irritability, or exaggerated tonicity of the muscular fibres of the bladder, subservient to a hypersensitive condition of the mucous membrane of the organ; and the little sufferers are accordingly dosed in progressively increasing quantities with belladonna, atropia, bromides or other sedatives; so that, in consideration of the prejudicial manner in which this subject is generally treated, it seems that there is still room for discussion directing our attention more in the channel of a judicious inquiry into its causation and pathology, which naturally calls for a clear perception of the anatomy and physiology of the parts.

First with regard to the mature type, as presented by the adult male.

FIGURE 1.

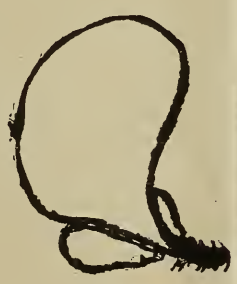

FIGURE 2.

The detrusor and sphincter muscles of the vesical system are innervated from two sources: The detrusors, those contained within the bladder walls, are supplied from the sympathetic system, and are, therefore, involuntary; the sphincters, two in number, of which the external is formed by the compressor urethræ (A, fig. 1), the internal by the ring of muscle making up the base of the prostate (B, fig. 1), are supplied from two sources; the external one is supplied entirely from the spinal cord, and is, therefore, entirely voluntary; but the internal or prostatic sphincter, while possessing some voluntary fibres, is composed mainly of involuntary muscle. As a result of this the process of recollection and voidance of urine is carried out in this way.[1] We will imagine fig. 1 to represent an empty bladder. Both sphincters are then closed and the point of separation between the bladder cavity and the urethra is clearly defined. But as urine accumulates in the bladder, it gradually lifts up and distends the vesical walls until the amount of distension reaches a certain degree, when the urine pressure becomes sufficient to divulse, to a slight extent, the urethral opening, allowing some of the urine to trickle into this prostatic portion, soon distending it also. It is then that the desire to urinate is first felt. But if it is not convenient for the person to answer the call at that time, his will acts on the sphincter—the external one more especially—which remains contracted until such time as he is willing to pass his water. Then the bladder is in a condition about like Fig. 2, and the cavities of the prostate and bladder are merged into one. When the person does wish to pass his water, the external sphincter and that part of the prostatic muscle located at its apex relax their vigil and open up a passage for the urine.

That all this is true may be proved in various ways, the simplest being to introduce a catheter when the bladder contains only a small amount of urine, mark the length of the catheter within the urethra just when the first drops of urine appear, then wait till the bladder is quite full and repeat the experiment, when it will be found that fully three-quarters of an inch less of tubing will be required now to "strike water" than was necessary in the first experiment, showing the shortening of the urethra in consequence of the encroachment of the bladder cavity on it. So that the power of voluntarily holding a bladderful of urine depends not so much on the strength of this internal sphincter as it does on the strength and amount of control which the person has over the external one. But, on the other hand, that the external needs the support and re-enforcement of the internal or prostatic sphincter is proved by the very affection under discussion.

In early infancy the retentive function is almost *nil*, and incontinence is therefore natural, physiological. Later, in childhood, the boy is educated up to and practices control over his sphincter, the external voluntary one, the only one as yet in working order, which he manages very well during the day, when urination is frequent and calls are promptly met; but at night, when his will power is banished in the land of dreams, the urine surprises the slumbering sphincter, steals past it and escapes into the bed. But with the development, towards puberty, of the prostatic tissue and the accession of involuntary sphincter action, such incontinence, whether nocturnal or diurnal, ceases; the involuntary comes to the assistance of the voluntary, bears its share of the burden, and the infantile annoyance becomes a nonentity. Should it persist after this epoch, we must attribute it to a continued weakness or lack of development on the part of one or both of the sphincters.

But it may be contended that this is not necessarily so—that the hyperexcitability first referred to will explain this phenomena equally as well. What do we know about "hyperexcitability" or irritability of the bladder? That wherever there is such a condition, it manifests its presence in unmistakable terms. There is frequency of urination, by day as well as by night, with pain that admits of no dallying when the call to urinate is felt. What man with an inflamed or irritable bladder-neck dares to disregard the signal of accumulated urine?

On the other hand, do we hear the little subjects of noctural incontinence make any complaints of this sort? If we listen attentively to his or his mother's description of the trouble, we will probably soon disabuse ourselves of preformed ideas of excitability, etc. The complaint is simply of *an inability to hold water*. There is no pain, no urgent desire to urinate, other than that produced by the remembrance that unless he take the

[1] "Gonorrhœa der Sexualorgane," Finger, 1888.

proper care, the consequences of parental wrath will follow the soiling of his clothes.

To be sure, we must admit that there are some cases for which irritability, in consequence of hyperacidity of the urine, or some such transient condition, must be held accountable, but such cases are as short-lived as their causes, and are not to be classed with those under discussion.

Concluding, then, that enfeeblement of the retentive powers is the *raison d' etre* of the malady, our object should naturally be to combat this defect. The administration of strychnia, thus aromatica, ergot, etc., probably has a certain value in this respect; but the remedy, reliable above all others, and the one that has done much to substantiate the views just presented, is that of electricity, applied not by placing one pole on the perineum and the other on the abdomen, in the vague hope that, guided by a kind Providence, the current may pass through the enfeebled muscles; but it should be conducted *through* them by means of an insulated electrode introduced into the urethra after the manner commonly employed in treating strictures with electrol ysis. Guyon, the originator of this method, directs that each seance be not longer than two or three minutes in duration, and not too frequent. Only the sphincters are to be galvanized. The female urethra, surrounded as it is by sphincter muscle throughout its extent, is treated by passing the electrode slowly back and forth from meatus to vesical neck.

Successes with this method, in both male and female patients, have been obtained and reported by Guyon, Jamin and others, whose names we do not now recall, and success in each case was forcibly emphasized by previous records of repeated failures with other established and approved plans.

We do not wish to be understood as advocating this as an invariably appropriate treatment for infantile incontinence, but our object is simply to express a belief that it is too little used in many cases in which close questioning and a definite diagnosis would point to it as the only rational method.—Ed. *Journal American Medical Association.*

THERAPEUTICS.

Plants and Their Alkaloids.

In an important paper recently read at the Academy of Medicine by that distinguished professor, Dr. Germain Sée, he very correctly stated that in therapeutics, alkaloids and the plants from which they are derived should not be confounded. These opportune remarks were made in regard to strophanthus and strophanthine, but he pointed out that they might be equally well applied to a number of alkaloids and plants used daily in our practice. In fact, we well know the essentially different nature of the effects of digitalis and digitaline, of opium and morphine, of cinchona and quinine, and of the many plants from which alkaloids are derived.

Coca is indisputably that drug to which above all others, these remarks can be applied.

Erythroxylon coca possesses, without doubt, analgesic properties, and is held as a superior local sedative, especially where pain exists in the region of the mouth and the throat (as noted and published by Professor Charles Fauvel, long before the discovery of the local effects of cocaine), and in calling attention to the virtues of this plant, it may be stated that the beneficial effects of wine of coca have been thoroughly established in tuberculous and other ulcerations existing on the tongue, the mouth, the lips, and on the vocal cords; in all this class of cases such a preparation is of great value, prolonging, as it does, the anæsthetic and sedative effects of cocaine when applied topically or when such application becomes, for one reason or another, impracticable, proving itself of great service to the physician by reason of its local action.

Coca differing essentially from cocaine, the action of the plant upon the general economy, and not its local action, should be borne in mind.

Coca is a most active stimulant tonic, especially when used in vinous combination. No better preparation can be employed than the "Vin Mariani," which contains all the valuable properties of the plant, combined with a generous and absolutely pure wine. This has been found to give the best results.

There are numerous conditions in which this preparation is indicated; in a general way, it is serviceable in all those various diseases which came under the clinical head of anæmia, weak heart, chlorosis, various forms of cachectic conditions, neurasthenia, general debility, and in convalescence from fevers.

Tuberculosis, presenting essentially anæmic features, it can be readily understood that here the happiest results may be obtained by the use of the above preparations of coca, as also in the other forms of phthisis.

Although coca is not a specific in phthisis, and without wishing to claim that it is a destroyer of the bacillus of Koch, it nevertheless here proves its efficacy, and, as quite recently stated in that important work, "La Phthise pulmonaire et Laryngée," by Dr. H. Libermann, Physician in Chief to the Army of France, "The bacillus alone is not the sole factor to be considered in phthisis."

All these data are of absolute importance, and at the same time the physician should have at his command some agent which in all cases will, by its reliable action as a diffusible tonic and stimulant, fill the following indication during treatment, namely, "the maintenance of perfect nutrition and the guarding against debility in its various forms."

The only tonic in every respect filling these indications, and which it has been found may be given for an indefinite period without any unpleasant reaction in vasting diseases, is wine of coca. The preparation known as Vin Mariani (prepared by Mr. Angelo Mariani, of Paris), which has been employed by the medical profession since the last thirty years, is the only one

which has given me uniformly good results without the unfavorable features which frequently follow in the wake of tonics and stimulants.

Thus will be seen the necessity of recognizing the merits of this plant independently of its alkaloid, and the wide field it should occupy in our therapeutics.—Dr. S. A. Nitard, *Le Bulletin Medical*, Paris, 8 Mai, 1889.

Rumination in Man, or Merycismus.—Dr. Paul Gallois has lately had an opportunity of studying gastric digestion, by keeping under his observation for some time a merycole—that is to say, a human being who ruminated. The patient was a man, æt. 30 years, in good health. In 1882 he had a very mild attack of typhoid fever. Some time afterward he noticed that shortly after a meal his food came up in mouthfuls from his stomach without nausea, and he instinctively masticated the fragments and swallowed them again. He could not say for certain when he first took to ruminating; this is the rule with merycoles, who often, after due thought, remember that their habit existed during their childhood. Dr. Gallois' patient grew tired and disgusted of his ruminations, and cured himself by discouraging the regurgitation of food,and eating but sparingly at each meal, confining his dietary to substances easy of digestion. Large meals had always been followed by free regurgitation, and the least digestible substances were the most freely brought up into the mouth. Without any further treatment this patient cured himself of his ruminating habit, and has not indulged in it for a year. Dr. Gallois studies this case in a paper published in the *Revue de Medecine* last spring. The "cud" brought up first after a meal included samples of everything swallowed. This did not confirm Kuss's theory that liquids pass straight into the duodenum along a supposed channel made by muscular con tractions of a tract of the walls of the stomach. The first "cud" was red like wine and smelled of wine; thus liquids must remain in the stomach for some time with the solid ingesta. Later, the cud became true chyme; then solid pieces of undigested salad leaves, gristle, etc., came up with the chyme; lastly, solid fragments of this kind were alone regurgitated. If the patient swal lowed them they were thrown up again, and he often spat them out to save trouble; yet if unable to do so, as when in society, he managed to chew them up so fine that at length the stomach sent them on into the duode num. The patient had no dyspeptic symptoms. The phenomenon of rumination in his case did not show that the stomach (as Blanchard supposed) had the power of selecting indigestible matter and throwing it up. Were that theory true, such matter would have come up first, and with pain or nausea; in this case it remained until it came up again without any more digestible material. Again, this case seems to prove that the cardiac orifice of the stomach is insufficient in a merycole and probably has no selective power in any subject. On the other hand, the case indicates that the pylorus has that power, though in a purely mechanical sense. The sphincter is resistant and contracted at the beginning of digestion; then it lets liquids, next grumous material, and lastly solids through into the duodenum. In cases of dilatation of the stomach, the fluid contents are expelled with difficulty into the small intestine. No dilatation existed in Dr. Gallois' case. In normal digestion the evacuation of the stomach continues, no doubt, throughout digestion, and does not take place suddenly and completely at one stroke, but gradually, the most solid ingesta passing last.—*Brit. Med. Jour.*

Œdematous Fœtus.—The birth of a fœtus disfigured by extreme œdema has frequently been recorded, such a fœtus surprises the practitioner and puzzles the teratologist. In an acardiac twin the headless and often the armless trunk is always more or less œdematous, owing to the abnormal course of the circulation. Drs. Alfred Smith and Ambrose Birmingham have recorded, in the *Journal of Anatomy and Physiology*, 1889, a case where œdema was due to absence of the thoracic duct. The subject was one of a pair of male twins prematurely born at the twentieth week of pregnancy. The author of the article in this case did not state whether the placenta was double or common to the twins, a point of some importance, as there is always a common placenta when one twin is acardiac. In this case, however, the diseased twin had a normal heart and large vessels, and did not seem to want any of its limbs. The appearance of the œdematous twin was grotesque; it was three times as large as its brother, and resembled two large tomatoes strung together, the upermost being the head, the lower the body. The features were buried in the big tuberosities which made up the face. The skin was of a peculiar pinkish color, which increased the resemblance of the monster to a pair of tomatoes. On dissection, the thoracic duct, the receptaculum chyli, and the mesenteric glands could not be found. The mesentery, skin and subcutaneous tissue were all carefully examined under the microscope, but no mesenteric glands and no lymphatic trunks could be detected. The subcutaneous tissue abounded in lymph spaces greatly distended with fluid, which could not be carried off owing to the absence of lymphatic vessels. In the twin brother of the œdematous fœtus the lymphatic system presented no abnormality. Thus this case differed in many respects from the œdematous acardiac twin, better known to teratologists, although it would be interesting to know if the cord, in Drs. Smith and Birmingham's case, joined that of the normal twin or was even inserted into the placenta very near the latter; an apparently trifling amount of communication between single placenta twins may cause great malformation. In order to throw more light on this subject it is very advisable that all who practise obstetrics should preserve any specimens of œdematous twins, acardiac or amorphous twins and

fœtuses bearing parasitic twin brothers, which may come under their notice in the course of their practice. Such specimens should be sent to some pathologist or curator for careful dissection.—*Br. Med. Jour.*

Radam's Microbe Killer.—The analysis of a patent medicine is more or less interesting to the physician since it affords him an opportunity to wonder at the ease with which people may be duped, and also satisfies his professional curiosity. Dr. R. G. Eccles, in the *Druggists' Circular*, reports an analysis of Radam's Microbe Killer, No.1, a compound prepared by a quondam Texas florist and widely advertised over the country, not only in the secular press, but also, we blush to write it, in several medical journals. Dr. Eccles' analysis reads thus: oil of vitriol, impure, 4 drams; muriatic acid, impure, 1 dram; red wine, about 1 ounce; well or spring water, 1 gallon. This concoction is sold for three dollars per gallon, less than five cents being required in its manufacture. The action of its constituents on the human economy is well known to physicians and therefore no explanation of its effects need be given. It cannot be expected that the laity, who know so little of medicine, will be competent judges of a worthy and a worthless remedy.

It is the duty of the medical profession to expose the dangers attending the administration of patent medicines, and if the people choose to take them, they have themselves to blame for any bad results that may follow. No good is done by abusing the men engaged in such enterprises, who have, perhaps, been deluded into deluding the public through ignorance or avarice. Argument on the part of the physician will not serve to change the mind of the person bent on the use of the preparation of this kind since the physician's counsel is considered biased, and his opinion is looked upon as that of a jealous rival. The public have not yet reached the point where they believe physicians to be sincere in their condemnation of quack remedies, or their advocacy of sanitary reform, for it is the only instance of a profession working directly against its own interests.—Ed. *St. Joe. Medical Herald.*

Eucalyptus in Scarlet Fever.—The value of eucalyptus in destroying the infection of scarlet fever cannot be too widely recognized. On October 26 I saw a nurse in a family where there were three young children. She had the rash over her chest and arms, the complaint having commenced about thirty-six hours previous. She was removed to the hospital, and Tucker's eucalyptus disinfectant was ordered to be freely used in the nursery, the children being kept in an atmosphere strongly impregnated with it for three days and nights; after that they were allowed out during the day, but the disinfectant was continued in the nursery for four or five days longer, when they were considered safe.

On October 27, I saw a girl, æt. about 11 years, whose sister had been sleeping with her. She had had sore throat about two days, and the rash was fully out. The sister was not allowed to sleep with her, but she spent most of her time in the room during the next three days, when the new Act came into force, and they were separated. Here the disinfectant was rubbed over the skin of the whole body night and morning for three days, afterwards at night only; the emulsion was administered, and the disinfectant freely sprinkled over the bed and about the room. The girl had a severe attack of fever, had rheumatism in her wrists and ankles for a few days. The desquamation was finished about the fifteenth day, and there was no appearance of albumen in the urine. The sister did not develop the disease, although exposed to the infection for five days, and three other childreen in the house did not take it. There was no carbolic or other sheet used over the door, the disinfection of the patient in the way described being sufficient to prevent any of the poison escaping from her.

It is to be hoped that others will try this method of disinfection, as, if it is as effectual in all cases as I have found it in all so treated during the last six months, there is every reason to believe that the infection of scarlet fever may be arrested in every case.—J. Brendon Curgenven, M.R.C.S., *British Medical Journal.*—*J. A. M. A.*

Professor Liebreich (*Therap. Monatsheft*) recommends the following method of treating *intertrigo:* The affected part should be cleansed with water and a neutral soap and carefully dried, after which the following salve should be applied:

℞ Acid. boric., - - - - - - 0.5
Lanolini, - - - - - - 50.0
Vaselini, - - - - - - - 10.0 M.

Ft. ung.

Before a second application the parts must be again washed.

The pigmentation of the face, or *chloasma* which appears during pregnancy, can be caused to disappear by the application of the following salve:

℞ Ol. theobromæ,
Ol. ricini., - - - - āā 75.00
Zinc. oxid., - - - - - 0.30
Hydrarg. ammon., - - - 0.12
Ol. rosæ., - - - - - - q. s. M.

Sig.—Apply morning and evening.—*V. Monier, Monatsheft f. prak. Dermat.*

Dr. John S. Billings has, with the approval of the Secretary of War and of the Surgeon-General, accepted the position of Medical Director of the University Hospital in Philadelphia to which he was recently elected. The duties of this new position will be so arranged as not to conflict or interfere with his duties as medical officer of the army at the Surgeon-General's office.

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